

4-H YOUTH DEVELOPMENT DIVISION

EXTENSION AGENTS IN CHARGE:

4-H Youth Development – Susan Schlichting

Agriculture - Stacy Campbell

Family & Consumer Sciences – Berny Unruh

Horticulture – Lauren Fick

THE 4-H CLUB PLEDGE

I Pledge

My **HEAD** to clearer thinking,
My **HEART** to greater loyalty,
My **HANDS** to larger service,
My **HEALTH** to better living, for my club,
My community, my country and my world.

THE 4-H CLUB MOTTO

“To Make the Best Better”



OUR MISSION –

With unique strategies and opportunities, Kansas 4-H Youth Development engages youth in reaching their full potential through partnerships with caring adults.

KANSAS 4-H LIFE SKILLS

4-H club work is a major and important part of the Cooperative Extension Service. The primary aim of the 4-H program is to provide opportunities to build life skills. These life skills are:

- ❁ **Healthy Interpersonal Relationships**
Getting along with others and interacting with people of all ages
- ❁ **Sound Decision Making**
Making choices based on applying what is known in a productive way
- ❁ **A Positive Self Concept**
Believing youth are capable and can be successful
- ❁ **An Inquiring Mind**
Asking questions and knowing how to obtain information
- ❁ **Concern for the Community**
Becoming aware of and working towards improving one's community

ELLIS COUNTY 4-H EVENT POLICY

County 4-H Event Policy is determined by the Ellis County 4-H Council with the advice of the local 4-H Leaders, District Extension Agents, State 4-H Staff and others interested in the program. 4-H Council is made up of 4-H members and adults representing each of the 4-H Clubs in Ellis County.

UNDERSTANDING 4-H JUDGING

Children join 4-H to have fun and make new friends. One reason why 4-H is so successful is because children choose to do whatever interests them. As participation increases, 4-H'ers learn more, begin to assess progress for themselves, and look to others for evaluation of their work. The judging process in 4-H is like real life. 4-H'ers set goals, work to achieve them, and reap rewards for their efforts.

Having one's accomplishments evaluated can be motivating and educational for 4-H'ers. When judges critique their work or performance, it serves as a guide to further improvement. The judging process is probably more valuable than the award or recognition. To plan, practice, and present a finished product is to "learn by doing". To graciously accept constructive criticism of one's work is a real-life experience. 4-H'ers learn quickly that judging results reflect a personal opinion, and that evaluation will vary among judges.

CONFERENCE JUDGING – The judge visits with the 4-H'er as he/she evaluates the product against a set of standards. The purpose of this judging is to determine what the 4-H'er learned in completing the project.

THE 4-H RIBBON SYSTEM – In 4-H most judging involves the Danish system of judging. In this system, the judges do not judge one person's work by comparing it to another's. The evaluation is made against a standard. A judge looks to see whether requirements are met.

If the work meets high standards, it receives an excellent rating and **purple ribbon**. A **blue ribbon** signifies very good work. A **red ribbon** signifies work of good quality that will benefit from further improvements. A white ribbon means that, for one reason or another, the exhibit did not meet all of the minimum standards. What it DOES NOT MEAN is that the exhibit isn't worthwhile! In fact, the white ribbon best emphasizes the meaning of 4-H; that the member has attempted a learned skill and demonstrated that skill in a public event. The public eye is one of the toughest tests that any 4-H'er can put his/her skills & knowledge up against. When 4-H'ers see a white ribbon, the first question they should be asking themselves is, "What have I learned, and how can I make it better?" A special **green ribbon** is presented to Cloverbud 4-H members for their participation in 4-H project activities. The exhibits of these young participants are not judged but are recognized for their participation.

Aside from any ribbon placings, what is most important is that the child was participating in an activity that will build his/her character in learning life skills that will be of benefit to them for life. People remember the child, not the ribbon color.

Kansas 4-H Ethics Guidelines

Doing the Right thing!! Some say ethics is just knowing and doing the right thing. Knowing the difference between right and wrong is easy, but doing the right thing is much more difficult! Building our character traits of trustworthiness, respect, responsibility, fairness, caring and citizenship help to make doing the right thing a little easier.

Trustworthiness means doing what you say you will do.

A trustworthy 4-H'er will:

- ✓ Plan & complete goals
- ✓ Adhere to enrollment and entry guidelines
- ✓ Develop project exhibits that show originality and creativity
- ✓ Provide daily care for your animals or make arrangements for help
- ✓ Follow the rules for animal ownership and registration

Respect is courtesy and proper treatment of people, animals and property.

Respectful 4-H'ers will:

- ✓ Speak kindly about leaders, fair committees, and fellow exhibitors and listen to others
- ✓ Keep animals comfortable and clean, treat them humanely by providing daily feed and water
- ✓ Help others in the project and give positive feedback or encouragement
- ✓ Take care of the property of others

Responsibility means doing the right thing, considering the consequences of your actions, and being accountable for your decisions. Responsible 4-H'ers will:

- ✓ Willingly plan and make exhibits for project
- ✓ Train animals to be exhibited safely
- ✓ Read, know, and abide by all rules
- ✓ Work at fairgrounds to prepare and clean-up for fair
- ✓ Work independently with leader / parent guidance

Responsibility is also demonstrated by good sportsmanship, good herdsmanship, and good showmanship at ALL times, not just when the judge is watching.

Fairness means listening to others, playing by the rules, and treating everyone equally. A fair 4-H'er will:

- ✓ Accept winning and losing with grace
- ✓ Follow ownership and registration deadlines
- ✓ Know and follow show rules
- ✓ Be considerate of other exhibitors
- ✓ Recognize each project has different rules and standards

Caring means showing concern for others, both to people you work with and to your animals. A caring 4-H'er will:

- ✓ Help new exhibitors
- ✓ Say "thank you" and express your appreciation for others
- ✓ Congratulate other exhibitors
- ✓ Avoid gossip, negative publicity, taunting, and teasing others
- ✓ Treat animals humanely, including providing daily feed and water to animals
- ✓ Demonstrate kindness and concern for others

Citizenship means making the home, community, country and world a better place to live for themselves and others. 4-H'ers demonstrate citizenship when they:

- ✓ Show leadership with younger 4-H'ers

- ✓ Work with less experienced exhibitors to improve their knowledge and skills
- ✓ Share resources with others
- ✓ Work at fair and other 4-H activities

By exhibiting the six pillars of character – trustworthiness, respect, responsibility, fairness, caring and citizenship 4-H members will show that they are truly working to “Make the Best Better” for Ellis Co. 4-H!

Taken in part from “Ethics in Youth Livestock Programs”, ISU and “What is the Real Purpose of 4-H Non-Livestock Projects” UM.



GENERAL RULES

Fair Entry Process – *Easy as 1-2-3*

1. Register your entries on <https://faireentry.com/Fair/SignIn/14990> by Thursday, July 1, 11:59 p.m.
2. Schedule your entries for a time to meet with the 4-H judge. <https://signup.com/go/jkKNRYq> If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.
3. Check in items on Monday, July 12, 3 – 7 p.m. (Except Horticulture, Crops and Foods items.) Those check in from 8 – 9 a.m. on Tuesday, July 13.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

1. All entries will use the official 4-H entry tag. Pick these tags up on Fair Clean Up Night or at the Ext. Office prior to check in. The tag is to be attached to the exhibit on entry day. Be certain that class numbers are correct. **NOTE:** Entry tags are to be attached directly to the article. Special labels are required on clothing projects and can be acquired from the Extension Office. Livestock entry tags will not be distributed.
2. Any information you would like others to know about your exhibit may be included on a 3x5 card and attached to your exhibit.
3. Attach an additional 3x5 card to each exhibit with the 4-H member name and 4-H club printed in large print to help spectators find your exhibit.
4. **4-Hers may exhibit only in the projects in which they are enrolled. On-line enrollment must be completed by May 1st.**
5. A project club member has the same rights and privileges as a community club member. Therefore, project club members may enter in any projects as long as they have enrolled in them prior to May 1.
6. **Cloverbud Members** – Cloverbud are 5 & 6-year-old 4-H members. See special Cloverbud division for entry information.
7. Premium checks must be cashed within sixty days. **Award winners are required to write a THANK YOU to their sponsor prior to receiving their award.** Bring these Thank You cards to the Extension Office in a *stamped envelope* to claim your prize. **If no thank you note is presented**

- within 60 days of issue by the Fairboard, these will be forfeited.**
8. **Exhibits will be released from 9:00-10:00 a.m. on SUNDAY, JULY 18.** If exhibitor cannot be present, please make arrangements for another club member to pick-up the exhibit. The fair association or superintendents will not be responsible for remaining exhibits.
 9. All exhibits must be the result of club work during the current year.
 10. Exhibits not meeting the criteria will drop one ribbon placing.
 11. **NOTE: ALL** notebooks and posters are judged on Tuesday, July 13. Judging will be a conference with a judge. **4-H'ers will schedule a judging time on-line ahead of the Fair.**
 12. **Any early release of exhibits without pre-approval will result in forfeiture of ALL Fair ribbon premiums.**
 13. Complete and file an Early Release Form at fair check in to request early release of 4-H & open exhibits for exhibit at other area fairs. **Early release will be allowed only from 8:30 – 9:00 on Sunday, July 18** and with this written prior approval. Forms are available on-line and at the Ellis County Extension Office. They will also be available at the fairgrounds during check in. Those choosing to remove exhibits early without an early release form on file will forfeit **ALL** fair premiums.
 14. Any animal, article or project not listed in the fair book will be ineligible to show for prize money unless other arrangements are made ahead of fair.
 15. Any exhibitor who is found to have tampered with or entered an exhibit that is not eligible or does not abide by the fair rules, will forfeit any awards.
 16. **Good sportsmanship shall prevail** by 4-Hers and adults or they will be penalized by the discretion of superintendents, County Agents, and/or the Ellis County Fair Board. Complaining to or interfering with a judge or superintendent by an exhibitor, parents, or leader, will disqualify the exhibitor involved.
 17. **An (*) in front of the class number designates State Fair eligible classes.** Members must meet age requirements to exhibit at State Fair.
 18. Transporting all livestock and large items going to the State Fair are the responsibility of the individual or the club.
 19. The Ellis County Fair Board will not be held responsible for any case of rabies that is contracted from animals at the Ellis County Fair.
 20. Age division of 4-H member will be as of January 1 of the current year in all classes. 4-H member must not have reached their 19th birthday as of January 1 of the current year.
 21. Where age division for Junior and Senior is not specified, Junior will be 13 and under by January 1 of the current year and Senior will be 14 and over by January 1 of the current year.
 22. Printed materials advertising any animal sales prohibited on the grounds.
 23. Any fundraisers held on the fairgrounds during the Ellis Co. Fair must have approval of the Ellis Co. Fairboard **prior to** the Fair.
 24. Firearms and weapons are not allowed to be entered or exhibited at the Ellis Co. Fair.

4-H RIBBON PLACEMENT

1. Exhibits and entries will be placed into purple, blue, red and white ribbon groups and participation for Cloverbuds. In case of no competition in a class, the judge will decide if the entry and prize money will be given accordingly.
2. Champion and Reserve Champion ribbons may be awarded in each division of each age classification. When awarded, Champions receive \$15, Reserve Champions receive \$10. If there is a sponsorship listed in the back of the fair book, the Champion and/or Reserve Champion will receive an additional \$15 cash award.
3. Cash premiums will be as follows: Purple Ribbon-\$4.00; Blue Ribbon-\$2.00; Red Ribbon-\$1.50; White Ribbon-\$1.00.

ELLIS COUNTY 4-H GRIEVANCE COMMITTEE POLICY

The success of the Ellis County Fair depends on the cooperation and help we all give each other. No matter how hard each of us tries there will always be areas of our program that need to be changed and updated. In areas of judging that involve personal judgment, there will always be differences of opinion. For these reasons, we have established the following grievance procedure.

The protest must be submitted in writing and presented to the Superintendent or a County Agent within 24 hours following the incident giving rise to the protest. The grievance committee will review the written complaint as a committee. Both the party filing the grievance and the party charged with the grievance must meet with the grievance committee. The committee will rule within 24 hours' maximum and contact the individuals involved. In the case of 4-H project entries, a grievance committee will convene and ruling will follow promptly.

The grievance committee reserves the final and absolute right to determine a ruling. **Judges decisions are final and not protestable.**

The grievance committee will be made up of the following parties:

Superintendent(s) involved, fairboard member, agents, and an impartial 3rd party (who may be teleconferenced in).

STATE FAIR ENTRIES

The Kansas State Fair books are on-line at <http://www.kansasstatefair.com>.

If your project is eligible for State Fair, please be aware of the following deadlines for registrations to be in the Extension Office. You may pick up any of the necessary forms at the Extension Office or the Schenk Building Office. **All State Fair exhibits must be pre-entered.**

July 15 4-H/FFA beef, sheep and swine pre-entries are due to the Kansas State Fair Office

August 1 4-H Horse Show pre-entries due on the KSFAIR website and in the State 4-H Office

July 20 Pre-entries for ALL other exhibits in the 4-H/FFA and 4-H Divisions are due in the local office. Look for opportunities to pre-enter these items during the Ellis County Fair.

If you get a purple or State Fair blue, you may be eligible to show at the State Fair. Please check with the Fair Extension Office or the local Extension Office to review State Fair rules. **You must be 9 as of January 1 of the current year to show at the Kansas State Fair.**

DIVISION A – CLOTHING CONSTRUCTION

SUPERINTENDENTS: Dara Jochum, Diane Kuhn, Kim Schmeidler
ASSISTANT SUPERINTENDENTS: Elizabeth Dickman, Michaela Dickman,
Devlyn Jochum, Anna Kuhn

1. Garments shall be carefully laundered or cleaned before being exhibited.
2. **LABELS:** Class number, county & name must be typewritten or printed on official labels (to be picked up at the Extension Office) or on a 3” x 2-1/2” piece of white cloth. Each article must be labeled. Sew or safety pin labels inside of garment back of neck or corner of article. (No straight pins may be used to attach these items) No care labels will be required, but the 4-H members should know how to care for the fabrics they purchase.
3. **CONSTRUCTION JUDGING WILL BE Thursday, July 8.** Schedule a time to meet with the judge prior to the event. Following judging, please return your entries to the Schenk building for display at Fair check in on Monday, July 12, 3-7 p.m.
4. Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.
5. Sewing Box - Educational exhibit for First Year Clothing Members only.
6. Garments may be judged for construction even though not included in the Style Revue judging.
7. Purple ribbon garments are eligible for State Fair if class and the exhibitor qualify (exhibitor must be 9 years of age). 4-H member may make two entries at the State Fair in this division, one in two different classes.
8. Educational Exhibit Classes – Share with others what you’ve learned in this project. If a poster, it must not be larger than 22” X 28”. It may be a notebook or other display. Take care to select durable materials that will withstand Fair conditions. Follow copyright laws. If the exhibit is a display, maximum size is not to exceed a standard commercial 3’x4’ tri-fold display board. Name and county/district must be clearly marked on educational exhibits. NO card table displays.
9. The exhibitor may attach an index card or photo, no larger than 4”x6” with the entry form to give the judge any information which the exhibitor thinks would be helpful for the judge to know. Explain if the exhibit contains any recycled materials.
10. Quilt exhibits are entered in the Heritage Fiber Arts project, unless quilting is a part of a garment for wear.

Class 1 An article, garment or outfit constructed by a 7 - 8-year-old exhibitor enrolled in the Clothing & Textile project.

Class 2 Educational exhibit prepared by a 7 - 8-year-old exhibitor enrolled in the Clothing & Textile project.

***Class 3** An article, garment or outfit constructed by a 9 - 13-year-old exhibitor enrolled in the Clothing & Textile project.

- ***Class 4** Educational exhibit prepared by a 9 - 13-year-old exhibitor enrolled in the Clothing & Textile project.
- ***Class 5** An article, garment or outfit constructed by a 14-year-old exhibitor or older, enrolled in the Clothing & Textile project.
- ***Class 6** Educational exhibit prepared by a 14-year-old exhibitor or older, enrolled in the Clothing & Textiles project.
- ***Class 7** Recycled Clothing Project – An item made of at least 50% recycled material (recycled means reusing an existing item in a new way). Could be remaking/redesigning a garment, re-purposing a clothing item for a new use, etc. Must include sewing of some kind. A 4"x6" index card **MUST** accompany entry describing the recycled materials and how they were used in the item.

DIVISION B – CLOVERBUDS

SUPERINTENDENT: Kayla North

1. 4-H Cloverbuds may exhibit or showcase age-appropriate activity related items from their 4-H Cloverbud experiences. Check items in and visit with the judge from 3 – 7 p.m. on Monday, July 12. Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.
2. 4-H Cloverbuds may showcase a product, poster or notebook for a show-and-tell type display.
3. 4-H Cloverbuds receive a special 4-H Cloverbud ribbon for their work.
4. 4-H Cloverbuds wishing to enter large livestock in the fair will enter in the Open Class Youth Livestock division. Find rules for this division in the Open Class section of the fair book.

Class 1 – Cloverbud Showcase

DIVISION D – 4-H ENERGY MANAGEMENT

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

SPECIAL RULES

1. Label each article giving owner's name, address, county, name of article and class.
2. Items that have been in use should be cleaned for exhibit.
3. A sheet of operation instruction should be furnished for any exhibit not self-explanatory.
4. If exhibit requires battery power, batteries should be furnished. Exhibit should be able to be operated using 110 or 120V AC or battery power.
5. No hand-dipped solder may be used on exhibits.

***Class 1** AC Electric Projects. Electric projects with a 110 or 120 V alternating current (AC) power source. Some project examples are household wiring demonstrations, small appliances extension cords, trouble lights, indoor or outdoor wiring boards, or shop lights. Projects may be a restoration or original construction. The project must be operational and meet minimum safety standards. AC projects must be 110/120 V, no 240 V exhibits are allowed, and must be constructed such that the judges have wiring access to examine the quality and safety of workmanship.

***Class 2** DC Electric Projects. Electric projects with a battery or direct current power source. This class includes electric kits or original projects. This class also includes demonstration DC powered 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.

***Class 3** Electronic Projects. Electronic projects with a battery or direct current power source. This class includes electronic kits or original projects. Examples include radios, telephones, toy robots, light meters, security systems, etc. May be constructed using printed circuit board, wire wrap, or breadboard techniques. Include instruction/assembly manual if from a kit. Include plans if an original project. Projects must be constructed such that the judges have access to examine the quality of wiring workmanship.

***Class 4** Educational Displays and Exhibits. The purpose of the educational display and exhibit is to educate the viewer about a specific area of the 4-H electrical or electronics project. The display or exhibit should illustrate one basic idea. This class includes any educational displays, exhibits or science fair projects which DO NOT have a power source, i.e. exhibits, posters or displays of wire types, conduit types, electrical safety, tool or motor parts identification or electrical terminology. Educational displays and exhibits must be legible from a distance of four feet, using a maximum tri-fold size of 3' x 4'.

SMALL ENGINES

All exhibits should involve engines smaller than 20 horsepower for classes 5 – 7
Displays are limited to 4' wide and 4' deep - both upright and floor displays.

***Class 5** Display - Exhibit a display, selecting one of the following options: 1) a display identifying different engine or lawn and garden equipment parts or a display showing the function of the various engine or lawn and garden equipment parts; OR 2) a display identifying and explaining the function(s) of different special tools needed for small engine work; OR 3) a display illustrating and providing the results of any one of experiments that are included in the project books. No complete engines, lawn tractors, tillers, chainsaws are permitted for display. Maximum tri-fold size is 3' x 4'.

***Class 6** Maintenance - Exhibit a display that illustrates either 1) Routine maintenance procedures OR 2) Diagnosing and troubleshooting specific problems in an engine. No complete engines, lawn tractors, tillers, chainsaws, etc. are permitted for display, using a maximum tri-fold size of 3' x 4'.

***Class 7** Operation - Exhibit an operable small engine (no more than 20 HP) overhauled or rebuilt by the member. Include maintenance schedule for the engine and a brief description of steps taken by the member overhauling or rebuilding the engine. Maximum tri-fold size is 3' x 4'. Engine should contain no fuel in tank or carburetor.

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

***Class 8** 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.

***Class 9** 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 E - ENTOMOLOGY AND BEE SCIENCE

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

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

SPECIAL RULES

1. A 4-H member may choose to exhibit in the Collection, Educational and/or Notebook class for each phase.
2. All entries should be submitted in an 18 x 24 x 3.5-inch wooden display box with a clear Plexiglas top. Boxes can be handmade or purchased as long as they are of the correct size and do not have a glass top.
3. 4-H members may choose to use one of two taxonomies:
 - a. As printed in "Insects in Kanas" book or
 - b. As printed on the "Insects in Kansas Book: 2016 Revised Taxonomy", which follows www.bugguide.net
4. Each exhibitor is required to identify each box with two identification labels bearing exhibitor's name, county, the class and statement of taxonomy used. One label goes in the upper left corner of the box (inside) and the other on the lower right corner of the box (outside). Arrange specimens in the box so it can be displayed lengthwise.
5. 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.

6. Arrangement of specimens: The preferred method is to arrange the insects in groups or rows parallel to the short sides of the box. Specimens are to be arranged by Order in the box, then family where required.

7. 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 appear on the second label. Collector's name (or host) on the date/locality label is optional. The specimens should be collected by the exhibitor and should focus on Kansas insects. Insects may be collected from one county into bordering states and labeled accordingly. Please refer to "Entomology Collection Exhibit Resource" for full details on out-of-state insects in collections.

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.

Class 1 INTRODUCTORY ENTOMOLOGY - suggested ages: 7 to 8 or beginners of any age. Years in class: 1-2. Display boxes: 2 cigar boxes (lids removed and each box covered in clear plastic wrap.) Cigar boxes should be about 2" x 6" x 8". Many department stores carry school supply boxes and are minus the printing, in fact, ordinary cigar boxes. Number of species: 15 minimum. Labels to the insect orders are required and must be pinned to the bottom of the box(s). Specimen labels: a date/locality label is required on each specimen. This label is centered on the pin beneath the insect. Locality refers to the county and state where collected; date refers to the date specimen was collected. Labels should be small and neat hand printing is preferred. Blank labels on page 29, of Entomology Unit I are not intended for this use.

***Class 2 BEGINNING I ENTOMOLOGY COLLECTION** - Display in one standard box a minimum of 50 and maximum of 125 species representing at least 7 orders. Follow the general guidelines listed for Collections. Members can exhibit in this class a maximum of 3 years, or until they receive a purple ribbon at the Kansas State Fair, whichever comes first.

***Class 3 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.

***Class 4 INTERMEDIATE ENTOMOLOGY COLLECTION** - Display a minimum of 100 and a maximum of 300 species representing at least 10 orders. Two standard boxes can be used. Follow the general guidelines listed for Collections. In addition, family identification is required for all insects in any two of the following six

orders: (Only two will be counted for judging)

a) "Insects in Kansas" book – Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera or

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

On a piece of paper list what you did to improve your collection during the current year. Members can exhibit in this class a maximum of 3 years. A 4-H'er may move up if they receive a purple ribbon.

***Class 5 ADVANCED ENTOMOLOGY COLLECTION** - Display a minimum of 150 and a maximum of 450 species representing at least 12 orders. Three standard boxes can be used. Follow the general guidelines listed for Collections. Family identification is required for all insects belonging to the six basic orders as outlined under the Intermediate phase. Only families in the above six orders will be counted for judging. Family identification of insects in the remaining orders is optional, but desirable as long as accuracy is maintained. On a piece of paper list what you did to improve your collection during the current year. Examples: what insects did you add or replace; what orders and/or families you added; what Leadership you provided in this project; and/or what insects you have studied. Attach paper to the back of one of the display boxes. Members may continue to exhibit in this class at the Kansas State Fair for an unrestricted number of years as long as they remain eligible for 4-H membership.

NOTEBOOK CLASSES

General Guidelines

1. Individual entries are to be placed for display in a three-ring notebook for competition.

2. 4-Hers may choose to use one of two taxonomies:

a. As printed in "Insects in Kansas" book or

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

3. 4-H'ers who have been previously enrolled in or are currently enrolled in the other phases of the Entomology project need to start with the Beginning Phase of Entomology Notebooks, not the introductory phase.

4. Each exhibitor is required to identify the notebook by placing a Title Page in the front of the notebook bearing the exhibitor's name, county or district and class 4-H'er is enrolled in and statement of taxonomy used:

a. "Insects in Kansas" book or

b. "Insects in Kansas Book: 2016 Revised Taxonomy", which follows www.bugguide.net

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

5. Specimen pages should be grouped according to order and should include one page per species. If more than one insect is in the photo, an arrow to indicate identified insect should be used.

6. Date, common name, full county name, state abbreviation and collector name should be included for each species. Collector's name on the specimen page is

optional.

7. Specimen pages should have two different views of the insect if possible. If pictures are taken on different dates/localities, include information for both.
8. A statement describing the habitat where found/host plant may be included and is encouraged and will be worth a bonus 10 points total, not per page. For Intermediate and Advanced notebooks, this is strongly encouraged.
9. A divider page is to be placed in front of each order of insects with the order name printed on the tab for the page and also on the front of the divider page.
10. For the Intermediate and Advanced classes, insects are also to be grouped by family behind each order divider.
11. If the exhibitor has been in the same class for more than one year, a separate sheet of paper needs to be added stating how many years the exhibitor has been in this class of the project and what the exhibitor did this year to improve their notebook. Place the paper just behind the Title Page in the front of the notebook.
12. A special project must be completed each year and included in the notebook. See project guideline materials for specifications.
13. Refer to the publication "Entomology Collection Notebook Guidelines" on the Kansas 4-H Entomology web page for more detailed rules for exhibiting.

***Class 6 INTRODUCTORY ENTOMOLOGY NOTEBOOK** - Display a minimum of 10 and a maximum of 30 insect species representing at least six different orders. Follow the general guidelines listed for Notebooks, including the Special Project. A 4-Her may exhibit in this class for a maximum of two years.

***Class 7 BEGINNING ENTOMOLOGY NOTEBOOK** - Display a minimum of 20 and a maximum of 60 insect species representing at least seven different orders. Follow the general guidelines listed for all Notebooks, including the Special Project. Members can exhibit in this class a maximum of 3 years or until they receive a purple ribbon at the Kansas State Fair, whichever comes first.

***Class 8 INTERMEDIATE ENTOMOLOGY NOTEBOOK** - Display a minimum of 60 and a maximum of 100 species representing at least nine orders. Follow the general guidelines listed for Notebooks, including the Special Project. In addition, family identification is required for all insects in any two of the following six orders: (Only two will be counted for judging)

- a) "Insects in Kansas" book – Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera or
- b) "Insects in Kansas Book: 2016 Revised Taxonomy" which follows www.bugguide.net - Odonata, Orthoptera, Hemiptera, Coleoptera, Hymenoptera, and/or Diptera. A 4-Her may exhibit in this class for a maximum of three years. A 4-H'er may move up if they receive a purple ribbon.

***Class 9 ADVANCED ENTOMOLOGY NOTEBOOK** - Display a minimum of 100 and a maximum of 200 species representing at least twelve orders. Follow the general rules listed for Notebooks, including the Special Project. Follow the general guidelines listed for notebooks. Family identification is required for all insects belonging to the six basic orders as outlined under the Intermediate phase. Only families in the above six orders will be counted for judging. Family identification of insects in the remaining orders is optional, but desirable as long as accuracy is maintained. Members may continue to exhibit in this class for an unrestricted

number of years as long as they remain eligible for 4-H membership.

EDUCATIONAL DISPLAYS

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

***Class 10 BEGINNING EDUCATIONAL EXHIBIT**

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

***Class 11 INTERMEDIATE EDUCATIONAL EXHIBIT**

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

***Class 12 ADVANCED EDUCATIONAL EXHIBIT**

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

BEE SCIENCE

SPECIAL RULES

Honey Exhibits

1. Exhibits must have been produced and packed since the member's previous year county fair.
2. Member can make only one entry per class.
3. Honey exhibits must have the entry form attached to the jar lid, such that it may be folded in a way that conceals the exhibitor's identity. No labels are to be placed on the glass portion of the jar.

Class 13 Two one-pound Queenline jars light honey

Class 14 Two one-pound Queenline jars amber to dark honey.

Basis of Judging Honey Exhibits:

Flavor - The exhibit must be free from objectionable off-flavor or after taste.

Cleanliness - The exhibit must be free from wax, bees, dirt, or other foreign materials.

Clarity - Exhibit must be free from crystals, froth, foam or other items that impair the clarity of the honey.

Volume - Exhibit must be filled to a uniform level; i.e. to the base of the jar lid.

Suitability - Exhibit container must be clean. Queenline jar free from obvious defects and have a new lid.

Flavor	20%
Cleanliness	20%
Clarity	40%
Volume	10%
Container	<u>10%</u>
TOTAL	100%

SPECIAL RULES

Educational Exhibits

1. Educational exhibits are limited to one standard box (18” x 24” x 3-1/2”).
2. Exhibitors must have maintained a colony of honey bees during the year in which they exhibit in the educational class. However, they do not have to exhibit honey in order to prepare an educational exhibit.
3. The purpose of the educational project is to learn more about the importance of life cycles, biology, etc., of honey bees and their products. Subject matter must be related to honey bees, but no further restrictions apply.

Class 15 Educational Exhibits

Basis of Judging Educational Exhibits

1. A definite message is to be conveyed by the exhibit. This message should be at a level understandable to the non-beekeeper; and be simple enough to be viewed and understood in a few minutes.
2. The exhibit is prepared in a way that is pleasing to the viewing audience. Items considered should include choice of background, legibility of descriptive signs or labels, organization of exhibited materials and overall appearance.

DIVISION F - FASHION REVUE

SUPERINTENDENTS: Dara Jochum, Diane Kuhn, Kim Schmeidler
 ASSISTANT SUPERINTENDENTS: Elizabeth & Michaela Dickman, Devlyn Jochum, Anna Kuhn, and Kayla North

Fashion Revue Judging will be held on Thursday, July 8 at the Unrein Family Building in the afternoon. Schedule a time to meet with the judge before the event. **The Public Fashion Revue** will be held the same day, beginning at 6:30 p.m. (Concession stand will be available.) Clothing construction judging will take place on Thursday, July 8. Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

SCORECARD FOR ALL CLASSES

I.	General Appearance	70%
II.	Construction as it affects appearance.....	30%

1. All Fashion Revue entries must be judged on **JULY 8** AND must appear in public Revue in order to receive premium money.
2. Junior Division will be those 13 or younger before January 1. Senior Division will be those 14 years and older on January 1.
3. A champion and reserve champion will be named in each subdivision if quality merits. Senior Champions and Reserve Champions will represent Ellis County at the Kansas State Fair. A member may compete in only one of the areas at the State Fair.

4. Member must be enrolled in clothing to participate in fashion revue.
5. **Complete both sides of the project record sheet. These are due with pre-entry forms for buymanship. Photos may be submitted at judging check in.**

CONSTRUCTED GARMENT

1. Garments modeled must be entered in the respective class.
2. Hand knitted, or crocheted garments may be modeled by those enrolled in the Fiber Arts project.
3. Member may model one entry in only two classes. In addition, each member may enter the “other class” in their age division by having a younger person model an outfit made for them by the member.
4. Majority of outfit must be constructed and modeled by the 4-H'er who made the garment/outfit. Everything which is commonly considered an outer garment must be constructed. A sweater, blouse, or shirt that is worn underneath another constructed garment can be purchased or made.

AGE 7-13

Class 101 An article, garment or coordinated outfit constructed by 4-H'er

AGE 14-18

*Class 110 An article, garment or coordinated outfit constructed by 4-H'er

KNIT OR CROCHETED

Class 117 Knitted or crocheted garment

PURCHASED GARMENT

1. Garments must be purchased for the 4-H project or made by another individual for the 4-H'er.
2. Member must make an itemized statement of the cost of all articles of clothing and present it to the judge.
3. Member may model two entries in buymanship.

BUYMANSHIP

GIRLS JUNIOR DIVISION (AGES 7-13)

Class 118 Jr. Girls Buymanship Outfit

GIRLS SENIOR DIVISION (AGES 14-18)

*Class 119 Sr. Girls Buymanship Outfit

BOYS JUNIOR DIVISION (AGES 7-13)

Class 120 Jr. Boys Buymanship Outfit

BOYS SENIOR DIVISION (AGES 14-18)

*Class 121 Sr. Boys Buymanship Outfit

\$15 OUTFIT CHALLENGE (ALL AGES)

Class 122 \$15 Outfit Challenge

1. Open to any 4-H member.
2. Limit one entry per person.

3. Must be a purchased outfit. Outfits may be selected and purchased from garage sales, thrift stores, consignment store or store bargains at the mall.
4. Cost of the outfit must be \$15.00 or less, not including shoes, accessories or undergarments.
5. A one-page entry form will be included with the exhibit that lets the judge know about where it was purchased, cost & why selected.
6. Outfits will be displayed at the fair.

DIVISION G –FIBER ARTS

SUPERINTENDENT: Connie Haselhorst

ASSISTANT SUPERINTENDENT: Aliyah Conner

Fiber Arts is defined as any method of creating a unique design with fiber, fabric, or yarn. This may include: making fabric (such as weaving, crochet, knitting, needlepoint); or when existing fabric is changed into something quite different (such as quilting or embroidery or ethnic art). Ethnic Fiber Arts should use a fiber or yarn or fabric to create the design exhibit. Non-textile (examples include wood, reed, straw, grass, etc.) baskets/pieces should be entered in the Visual Arts division.

SPECIAL RULES

1. Open to all members enrolled in the Fiber Arts project.
2. Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time ahead of the fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.
Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.
3. All exhibits must have been created since the previous year's county fair.
4. LABELS: A label containing name, address, county, and class shall be typewritten or printed on a 3 x 2 ½" piece of cloth sewn to the article on underneath side near a corner or edge. For garments, attach ID label to the front left shoulder seam, or left side waistband, as if you were wearing the garment, or to the lower left corner of flat articles.
5. A member may enter only two exhibits in each class at the Ellis County Fair. All articles/garments must be finished for use.
6. When articles which are normally worn as a pair are exhibited, both articles must be shown together. Fasten articles securely with yarn.
7. Special consideration will be given to articles which are of original design. Such articles should have a note attached explaining the original design.
8. The exhibitor should attach an index card, no larger than 4" x 6", with the entry form to give the judge any information on what parts of the exhibit they made, processes used, or other information which the exhibitor thinks would be helpful for the judge. For all items please indicate if item was made from a kit. For all items please indicate fiber content, and specifically if they are made of at least 90% wool. For quilted items indicate who did the quilting and binding.
9. When the exhibit is a sewn garment that also includes one or more Heritage Fiber Art techniques (i.e. knitting, crocheting, needle arts, or patchwork & quilting), the determination of what division (Clothing or Heritage Fiber Arts) and in which class to enter will be left with the 4-H participant.

10. All exhibits which need to be hung **MUST** have the appropriate saw tooth hanger, rod, wire or other mechanism attached in order to be properly displayed.

***Class 1** Crochet, an article, including felted items

***Class 2** Knitting, an article made either by hand or by knitting machine, including felted items

***Class 3** Needle Arts, an article created by hand using any of the following techniques:

1. Embroidery & cross-stitch
2. Needlepoint
3. Candle wicking
4. Crewel
5. Lacework
6. Appliqué

***Class 4** Patchwork & Quilting, an article – It is an acceptable practice for the exhibitor to create the patchwork or quilted article and have someone else quilt it.

***Class 5** Rug Making, a rug – acceptable techniques include braiding, latch hook, tying, floor cloth, etc. The finished product should be an item that would be used in the home.

***Class 6** Spinning, a skein – minimum 10 yards in length.

***Class 7** Weaving, a woven article – Members should attach information about the type of loom or process used on a 3x5 index card. Woven wood, reed, baskets should be entered in Visual Arts.

***Class 8** Ethnic Arts, an article – This is defined as a Fiber Art technique that is associated with a specific country or culture. It is a practical skill that was developed to provide basic family needs such as apparel, home furnishings or decorations. It is also defined as a method that has been maintained throughout history and passed on to others, often by observation and example, such as batik, Swedish huck weaving, mud cloth, bobbin weaving, tatting, etc. Members should attach information on the history of the ethnic fiber art, where it was used, by whom, how it was used, short description of the technique, etc. on a 3"x5" card.

***Class 9** Macramé, an article

***Class 10** Fiber Arts Educational Notebook - Share with others what you learned in this project about a particular Fiber Art. Exhibits should be in the form of a notebook or binder. The notebook should include a narrative section describing the fiber art. It should include a clear description of the project, technique, budget, supplies, goals, accomplishments, successes, failures, and future plans. It may include samples of techniques, how-tos, photographs of completed projects, or other ways of educating others about fiber arts. **NOTE:** a collection of brochures, web pages, patterns, record book forms, etc. does not constitute an educational notebook. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Name, local unit and fiber art covered must be clearly marked in the notebook.

DIVISION H - FOODS & NUTRITION

SUPERINTENDENTS: Haley Gagnon & Linda Robben

ASSISTANT SUPERINTENDENTS: Elizabeth Noble

Register your entries into the fairentury.com system by the Fair entry deadline. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. **4-H'ers will bring their items in to check in at the scheduled judging time.**

If a 4-H'er cannot attend conference judging, exhibits should be entered between 8:00 and 9:00 a.m. on the 13th. If a 4-H'er cannot attend judging, attach a note card explaining how the product was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

1. On the entry tag, **state product name under class name.**
ie. CLASS 1: Chocolate Chip Cookies
2. Grand Champion foods (Jr. and Sr. Division), Best Bread & Best Cookie Exhibits will be auctioned at the livestock sale on Saturday. Proceeds go to the individual 4-H'er. All other food exhibits will be sold at the food sale on Tuesday, following judging. All proceeds go to 4-H Council. Those 4-H'ers who do not wish to have their product sold, should indicate so on their entry tag before bringing them in for judging. **These foods must be picked up by 8:00 p.m. on Tuesday, July 13.**
3. Alcohol (ex. Wine, beer and hard liquor) is not allowed as an ingredient in food entries. Entries with alcohol in the recipe will be disqualified and not be judged.
4. 4-Hers are responsible for keeping perishable items that receive purple at safe temperatures while being held for Champion awards.
5. A member may enter up to 6 entries per class. **Each 4-H member is limited to a total of 6 exhibits.**
6. Recipes in the 4-H Food project guides are only guidelines. Recipes from other sources may be used. **Please include your recipe with your food entry.**
7. Any baked product than can be removed from the pan should be placed on paper plates or cardboard; otherwise exhibit in a disposable container of appropriate size for the exhibit. Seal plastic bags with wire tie (zip type bags acceptable), not with staples or tape.
8. Regulation labels are not required for the county fair but are required for the State Fair.
9. Carefully tie or tape the entry tag and recipe card to the outside of the exhibit.
10. All unfrosted cakes should be exhibited in an upright position with crust showing, except for those cakes made with special designs such as bundt cakes. They should have top crust side down.
11. For food safety purposes, any food with dairy based fillings and frostings (ex. Cream cheese), raw eggs, flavored oils, "canned" bread or cakes in a jar, cut fresh fruit or any food requiring refrigeration (ex. Bacon) or unbaked exhibit with raw flour (ex. No bake cookies) or garnishes that are perishable (such as fruit, bacon, etc.) must be entered as a perishable exhibit. In most cases, perishable exhibits will not be displayed.
12. Foods will be judged by consultation judging. The exhibitor, his/her parent or foods leader may be present at the judging.
13. Food Gift Package and/or Specialty Food Product: No alcoholic beverages will be accepted. A food gift package must contain at least 3 different food items, (prepared for human consumption) made by the 4-H'er, in a suitable container no larger than 18"x18"x18". Prepared food items must have recipes attached with the

entry. On the back of the entry card, answer these questions: a) What is the intended use? b) What food safety precautions were taken during and after preparation? As a State Fair entry, this item will count as a nonperishable food product, not as an educational exhibit.

14. A decorated food item must be a food item, not a decorated box.

15. Dried foods are to be exhibited in a small canning jar. Suggested amounts 1/3 to ½ cup, or 3 to 4 pieces per exhibit. If dried food product is not in a canning jar, it will be lowered one ribbon rating.

16. All baked goods must be left whole and uncut. Small items, such as cookies and rolls, should be the same shape and from the same recipe. **Exhibit 3 cookies, 3 muffins, 3 bread sticks, 1 loaf bread,** etc.

17. A member may exhibit only one baked product and one educational display in the Food and Nutrition division at the State Fair. Members exhibit by age. Regulation labels are required.

18. Whole pieces of food will be held back for display during the Fair.

19. Educational Exhibits: Can be a poster, notebook or other display showing and describing something learned, a project activity done, a food & nutrition community service program, etc. Should relate to things done in the project in which the member is enrolled. Poster will be judged with 60% on nutrition information and 40% on poster appearance. Displays are not to exceed a standard commercial 3' x 4' tri-fold display board. Name and county or district must be clearly marked on educational exhibits.

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

21. For state fair entries complete recipes with ingredients and instructions must be attached with the entry, or the placing will be lowered one ribbon when judged.

22. Kuhn's Diamond Jeweler's Award: A 4-H'er can win award only once. Award presented to Senior Champion Foods next in line to receive award, Reserve Champion Senior Foods followed by a senior drawn from purple award entries.

23. Augustine's Bakery Award: Award presented to the 4-H'er with the Best Bread exhibit. A 4-H'er can win award only once. Next in line to receive award, Reserve Champion Bread, followed by a drawing from purple award entries.

24. In the Senior Division, convenience foods & mixes can be used in an exhibit but must be prepared differently than the original package directions. Junior members may enter an exhibit that is created from a mix as per package directions.

Class 1 For 7-13-year-old exhibitors; a nonperishable food product from the 4-H Foods & Nutrition Curriculum or similar recipe.

Class 2 For 7-13-year-old exhibitors; a perishable food product from the 4-H Foods & Nutrition Curriculum or similar recipe.

Class 3 Educational exhibit prepared by 7-13-year-olds.

***Class 4** For 14 -18-year-old exhibitors; a nonperishable food product from the 4-H Foods & Nutrition Curriculum or similar recipe.

Class 5 For 14 - 18-year-old exhibitors; a perishable food product from the 4-H Foods & Nutrition Curriculum or similar recipe.

***Class 6** Educational exhibit prepared by 14 -18-year-olds.

***Class 8** Food Gift Package. No alcoholic beverages will be accepted. A food gift package must contain at least 3 different food items (prepared for human

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

FOOD PRESERVATION

1. Open to all members enrolled in foods and nutrition project.
2. All exhibits must have been preserved since the previous year's county fair.
3. Recommended recipes and processing methods must be used. Recipes and processing methods from the sources below are recommended. Recipes must be from 1995-Present **AND MUST BE ADJUSTED FOR ALTITUDE** based on your processing location, or it will be disqualified. Processing methods that will be disqualified include: open kettle-canning, oven canning, sun canning and using electric multi-cookers. For more information on electric multi-cookers, see http://nchfp.uga.edu/publications/nchfp/factsheets/electric_cookers.html . Untested recipes will be disqualified for food safety reasons. Tested recipe resources include:
 - K-State Research and Extension Food Preservation publications
 - Other University Extension Food Preservation publications
 - USDA Complete Guide to Home Canning
 - So Easy to Preserve, 6th edition, The University of Georgia Cooperative Extension Service
 - Ball Blue Book Guide to Preserving
 - Ball Complete Book of Home Preserving
 - Canning mixes (i.e. Mrs. Wage's, Ball)
 - Pectin manufacturers (i.e. SureJell, Ball)
 - <http://www.rrc.k-state.edu/preservation/recipes.html>

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

4H712, Food Safety Recommendations for Food Preservation Exhibits

(<http://www.ksre.ksu.edu/bookstore/pubs/4H712.pdf>)

MF3170 "10 Tips for Safe Home-Canned Food

(<http://www.ksre.ksu.edu/bookstore/pubs/MF3170.pdf>)

MF3171 "Sassy Safe Salsa at Home"

(<http://www.ksre.ksu.edu/bookstore/pubs/MF3171.pdf>)

MF3172 "What's Your Elevation?"

(<http://www.ksre.ksu.edu/bookstore/pubs/MF3172.pdf>)

MF3241 "How to Guide to Water Bath Canning and Steam Canning

(<http://www.bookstore.ksre.ksu.edu/pubs/MF3241.pdf>)

MF3242 "How to Guide to Pressure Canning

4. Alcohol is not allowed as an ingredient in food preservation entries. Entries with alcohol in the recipe will be disqualified and not be judged.
 5. No member may make more than one entry in each class.
 6. **Each exhibit must have the complete recipe and instructions attached with the entry card, or it will be disqualified.** Recipe must include exhibitor name, recipe source, date of publication and altitude where food was processed. If using Mrs. Wage's or Ball mixes, indicate the date the mix was purchased.
 7. Exhibits must be processed in clean, clear standard canning jars, with matching brand (ex: use Ball lids on Ball jars, or Kerr lids on Kerr jars, etc.) two-piece lids. Do not use colored jars, fancy padded lids, fabric over wraps or cozies as they interfere with the judging process. No fancy packs unless recipe states to do so (ex: Pickled asparagus). Jars must be sealed when entered. For food safety reasons, the size of jars used must not be larger than the jar size stated in the recipe. (ex.: Salsa is canned in pint jars only, no quarts.) Note: There are 12-ounce, 24-ounce and 28-ounce canning jars available and may be used. Use pint jar canning process recommendations for 12-ounce jars. Use quart jar process recommendations for 24 and 28-ounce jars.
 8. Each jar exhibited must be labeled. The label must not cover brand name of jar. The label must give Class No, Product, Canning Method, Process Time, Pressure (psi), date processed including month and year, Altitude where processed, Name, and County/District. Label templates may be found at: https://www.kansas4-h.org/events-activities/fairs/kansas-state-fair/docs/foods-and-nutrition/Foods_Label.pdf
 9. Hole punch the entry card and use a rubber band to attach the entry card and recipe around the top of the jar.
 10. If dried food product is not in a canning jar, it will be lowered one ribbon placing. Suggested amount: 1/3 – 1/2 cup, or three or four pieces per exhibit. All meat jerky must be heated to an internal temperature of 160 degrees F before or after drying. This is not the drying temperature! Dried products must include the recipe, preparation steps and heating instructions. Jerky not heated to an internal temperature of 160 degrees will be disqualified and not be judged. Heating information can be found in "Dry Meat Safely at Home" www.ksre.ksu.edu/bookstore/pubs/MF3173.pdf
- *Class 9 Sweet spreads (Fruit and/or Vegetables), Syrups, one jar
- *Class 10 Fruits, Juices, Fruit mixtures (Salsa, Pie Filling, etc.), one jar
- *Class 11 Tomato/Tomato products, Tomato Juice and Tomato Salsas, (Salsa in pints only, no quarts) one jar
- *Class 12 Low acid vegetables (green beans, corn, vegetable mixes, etc.), one jar
- *Class 13 Pickles (Fruit or Vegetable), Fermented Foods, Relishes, Chutney, one jar
- *Class 14 Dried Meats, one small jar
- *Class 15 Dried foods, one small jar
- *Class 16 Canned Meats, one jar

DIVISION I - FORESTRY

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

SPECIAL RULES

1. Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.
Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.
2. Name, club, age and year in project should be on front cover of notebook or prominent position on other exhibits.
3. Prepare a label and place in the lower right-hand corner of the page. Label should include proper common name as listed in the 4-H bulletin, 4H334, "List of Native Kansas Forest Trees", location (county) where collected, and date (day, month, year) or (month, day, year) collected.
4. All notebook exhibits to be mounted on 8.5" x 11" heavy stock paper and placed in loose-leaf binders. (Magnetic or adhesive filler sheets for photographic prints or sheet protectors are recommended). Twigs and fruit collections may be exhibited in whatever manner you choose. Maximum tri fold size is 3' x 4'. Resources for exhibiting are located on the Kansas 4-H forestry project page: <https://www.kansas4-h.org/projects/agriculture-and-natural-resources/plant-sciences/forestry.html>
5. See Forestry Project Book for details on mounting.
6. Divide specimens into the following (2) sections: Native Kansas Trees and Non-Native Trees.
7. New specimens collected during the current year, cannot be a duplicate species of a previous specimen.
8. Group specimens according to the years collected (ex. "old-previous years" and "new")
9. If you retrieve information for your forestry exhibit, you must include a reference citation to the source.
10. When replacing previously displayed samples, due to degradation, improper mounting or incorrect identification, the specimen label must also be updated. Replacements do not count as new specimens. Replacements should be displayed in the "old previous" section of the display.
11. Variations of varieties do not count as different species or specimens.
12. Leaves should be identified with an appropriate label located near the leaf on the same page. These labels should include (1) The proper common name as listed in the 4H334, "List of Native Kansas Forest Trees " (<https://www.bookstore.ksre.ksu.edu/pubs/4H334.pdf>); (2) Location (city and/or county) where collected; and (3) date (day, month, year) or (month, day, year) collected.
12. In all leaf collections, exhibit one complete leaf where possible. If leaf is too large, exhibit as much as possible. Sketch in reduced scale the entire leaf and illustrate where the exhibited portion is from. **Note:** A "leaflet" is incorrect when

displayed as the complete leaf for the tree.

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

JUNIOR 4-H FORESTER

Knowing Trees as Individuals (Leaf Collections)

Exhibit one complete leaf where possible. Where leaf is too large, exhibit as much of terminal portions as possible. Sketch in reduced scale the entire leaf and illustrate where the exhibited portion comes from.

***Class 1** Beginning - Exhibit leaves of 10 different native Kansas trees collected within the year. Exhibit can include non-native leaves in addition to the required number of leaf specimen, or leaf, twig and fruit of 5 different trees. Exhibit non-native in addition to native Kansas trees category. **OR** Exhibit a minimum of 5 native Kansas trees showing leaf, twig, and fruit from each species collected.

***Class 2** Intermediate - Exhibit leaves of 20 (include 10 new and 10 previously collected in beginning class) different native Kansas forest trees, or leaf, twig and fruit of 10 (includes 5 new and 5 previously collected in beginner class) different trees. Can exhibit non-natives in addition to native Kansas trees. **OR** Exhibit a minimum of 10 native Kansas trees showing leaf, twig, and fruit from each species collected. This exhibit must include 5 new leaf, twig, and fruit specimens.

***Class 3** Senior - Exhibit a minimum of 30 different leaves (includes 10 new specimens) from native Kansas trees. Exhibit can include non-native leaves in addition to the required number of leaf specimens collected from native Kansas trees. **OR** Exhibit a minimum of 15 native Kansas trees showing leaf, twig, and fruit from each species collected. This exhibit must include 5 new leaf, twig, and fruit specimens.

***Class 4** Advanced - Exhibit leaves of 40 (includes 20 new specimens) different native Kansas forest trees, or leaf, twig and fruit of 20 (includes 10 new and 10 previous classes) different trees. Can exhibit non-natives in addition to native Kansas trees. **OR** Exhibit a minimum of 20 native Kansas trees showing leaf, twig, and fruit from each species collected. This exhibit must include 10 new leaf, twig, and fruit specimens.

** Exhibit one complete leaf where possible. Where leaf is too large, exhibit as much of terminal portions as possible. Sketch in reduced scale the entire leaf and illustrate where the exhibited portion comes from.

How a Tree Grows

***Class 5** Entry may include a project notebook with 10 or more seeds collected with pictures showing a germination study or a mounting of a thin section of wood cut from the end of a log or top of stump labeled with information such as kind of wood and age of tree when cut or exhibits an illustration of how a tree grows.

Tree Appreciation

***Class 6** Entry may include a research or reporting project notebook with no more than 10 pages based on the exhibitor's selected tree. This notebook may include sketches, drawings, pictures, a story, or any other things which will help tell about the tree you have selected.

SENIOR 4-H FORESTER

Growing and Protecting Trees

***Class 7** Display/Notebook: Entry requires a display, or project notebook, telling about project and pictures before, during, & after planting seedlings, a container tree, or a balled and burlapped tree. Maximum tri-fold size is 3' x 4'.

Tree Culture

***Class 8** Display/Notebook: Entry requires a display or project notebook showing your project work and include pictures of before, during and after woodlot improvements. Maximum tri-fold size is 3' x 4'.

How Forests Serve Us

***Class 9** Entry may include collected wood samples (all or partial) and a 2-page essay. Wood sample display to be mounted on poster board or any stiff material no larger than a 3' x 4' tri-fold. Essay should be displayed in a covered binder.

***Class 10 Educational/Creative exhibit** - Entry must be directly related to tree identification or Forestry. Type of exhibit is open (notebook, poster, collection box, etc.) given a maximum tri-fold size of 3' x 4'. Care should be taken to use durable materials that will withstand State Fair conditions. This is a good class to exhibit an unusual collection.

DIVISION J - GEOLOGY

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

SPECIAL RULES

1. The standard size exhibit box should be 18" x 24" x 3-1/2". 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. If a box has a sliding glass or Plexiglas cover (Plexiglas preferred), it must be removable from the top. Screws, locks, or other devices that would prevent judges from removing cover should not be used.
2. Each exhibitor is required to identify each display box by placing an identification label hearing name, county, and number so specimens in the upper left-hand corner of the glass cover (inside - use clear double-sided tape to adhere gummed labels) and by attaching a label with the same information on the lower right corner of the box (outside). The inside label is to also indicate the class number.
3. Exhibitor may enter in both Geology and Lapidary classes. Exhibitor may show in only one of the three Geology classes. Exhibitor may also show in Geology class (special exhibit) and in the Lapidary class.
4. Geology specimens should be labeled with the number of specimens, date collected, specimen name or description, and locality (county) where collected.
5. For the Geology classes (1, 2, 3) specimens should be mounted in the box by

proper groups - rocks, minerals, fossils.

6. For Geology classes (1, 2, 3) all specimens must be collected by the participant (not purchased) from locations in Kansas. Out-of-State specimens will not count in the minimum for the class, nor will they be considered in the judging.

7. For Geology classes (1 – 5) specimens should be mounted in the box by proper groups: rocks, minerals, fossils. Fossils must be identified to the Phylum, Class and Genus level. Genus name is to begin with a capital letter. Species name is all lower case. Genus and species names must either be italicized or underlined, not both. The words “phylum, class, genus” on labels are to be spelled out, not abbreviated. More than one specimen of the same kind of rock or mineral or species of a fossil may be exhibited if this duplication represents different geological formation names listed on the I.D. card; Composite Brachiopod from limestone, not just Brachiopod or Composita Brachiopod).

8. 4-H’ers should type or print your own labels carefully.

9. All State Fair rules will be followed for State Fair exhibits. Plexiglas covers are required for State Fair.

NOTE: Exhibitor may show a total of two entries, one in class, 2, 3 and 4 and one in the remaining classes.

***Class 1** Geology. Display at least 15 different rocks, minerals or fossils collected during the current year. Limited to one exhibit box 13” x 24” x 3.5” with glass or Plexiglas cover. Fossils must be identified to the phylum level.

***Class 2** Geology. Display at least 30 different rocks, minerals or fossils, at least 5 each. 15 must be collected during the current year. Limited to one exhibit box 13” x 24” x 3.5” with glass or Plexiglas cover. Fossils must be identified to the phylum level.

***Class 3** Geology. Display at least 45 different rocks, minerals or fossils 15 must be collected during the current year. More than one specimen of the same kind of rock or minerals or species of a fossil may be exhibited if this duplication represents different geological formations. Specimen label must show this distinction. Exhibit limited to two boxes 13” x 24” x 3.5” with glass or Plexiglas cover. Exhibit should include approximately 15 specimens of current year’s work. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key. Fossils must be identified to the phylum level.

***Class 4** Geology. Display at least 60 different rocks, minerals or fossils - at least 5 of each. 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. Exhibit limited to two boxes 13” x 24” x 3.5” with glass or Plexiglas cover. 15 must be collected during the current year. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key. Fossils must be identified to the Phylum Class and Genus levels if possible.

***Class 5** Geology Educational Display. Special exhibit relating geology to everyday living; or to a mineral test, a rock formation, geological history, species of a fossil, forms of one mineral, or a variation of. One kind of rock, archeological artifacts, or Indian artifacts. Digital formats are accepted. Please make arrangements for the judge to view your exhibit and have a hard copy for display.

Exhibit limited to 4 feet of table space or to no more than 2 exhibit boxes with glass or Plexiglas cover.

***Class 6 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. 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.

Lapidary Classes **NOTE:** The lapidary classes will be judged on the following criteria:

Workmanship and content	60 points
Presentation and showmanship.....	30 points
Accuracy of information.....	10 points

An exhibit box smaller than the standard size may be used for the Lapidary exhibit, if appropriate (18" x 24" x 3.5" or a smaller 18" x 12" x 3.5") size. Specimens should be arranged across the 18" dimension of the box. All boxes must have a removable Plexiglas cover.

***Class 7 Lapidary.** Display at least 5 varieties of polished (tumbled) specimens and 5 varieties of unpolished specimens that have not yet received lapidary treatment. These do not have to be an example of "before and after", nor do they have to be self-collected. Locales must be identified. Only those exhibiting lapidary first time may exhibit in this class.

***Class 8 Lapidary.** Display before-and-after examples of at least 3 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. There is no requirement that the 4-H'er collect any of these. Locales must be identified. Lapidary work should be done during the current 4-H year.

***Class 9 Lapidary.** Display before-and-after examples of at least 6 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. At least two varieties should be collected from the native site by the 4-H'er, at least one of which comes from Kansas. Locales must be identified. Lapidary work on at least three varieties should be done during the current 4-H year.

***Class 10 Lapidary.** Display before-and-after examples of at least 9 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. At least three varieties should be collected from the native site by the 4-H'er, at least two of which comes from Kansas. Locales must be identified. Lapidary work on at least three varieties should be done during the current 4-H year.

***Class 11 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 K - HOME ENVIRONMENT

Register your entries into the fairentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

SPECIAL RULES

1. Articles may have been used, but if so, they should be carefully laundered or cleaned before being exhibited.
 2. Only articles to be judged may be included in the exhibit.
 3. A summary including plans, explanation of how the items was made or refinished, and how it fits into the color and design of the room. Summary could also include project inspiration, challenges, who helped you, and any other information that could be helpful to the judge. Summary should be in a plastic protective sleeve and attached to exhibit.
 4. Projects with missing or insufficient summary will be lowered one ribbon placing (i.e. a blue ribbon exhibit will receive a red ribbon).
 5. Exhibits should be of high quality (as compared to quick, simple crafts), suitable for use in the home several months throughout the year. Holiday-specific items are discouraged.
- ***Class 1** Single Exhibit: An article (furniture, fixtures, interior or exterior, etc.) made or refurbished by the 4-H'er for the home. Must include attached summary.
- ***Class 2** Design Board. Boards must be on foam core or a standard tri-fold display. Include: color scheme, wall treatment, floor treatment, samples, etc. and/or floor plan for a room. Must include attached summary.
- ***Class 3** Notebook. Notebooks may include floor plans, swatches, colors, stories, photographs, and project records which detail what was accomplished this year with a given indication of long-term plans. Notebooks should also include project inspiration, challenges, who helped you, and any other information that could be helpful to the judge. Additional summary is not required for Notebook exhibits.

GROUP EXHIBIT

Group exhibit shall be accompanied by the Home Environment Record Sheet, and the story required as a part of that record, plus the color scheme and floor area record. Also include a long-term plan for your improvements and a cost record of improvements made up to the current year. Don't include current year's costs. They are on current year's record. (Approximate exhibit space 3 x 4 feet) Include different articles that can effectively represent work in project and pleasingly fill a 3 x 6-foot space. The record will tell the complete story, so exhibit doesn't have to include everything.

Class 4 Group Exhibit

DIVISION L - LIFE SKILLS JUDGING

SUPERINTENDENT: Michelle Thacker

1. Time of contests - Thursday, July 8, 1:30 – 5:30 p.m. at the Unrein Family Building and on Tuesday, July 13, 10 – 11:30 at the Deutschfest Hall. These are

two separate judging experiences with different classes. Contestants may walk through at their own pace. All 4-H members are encouraged to participate.

No pre-registration required.

2. Juniors will judge four classes plus a reason class. Seniors will judge six classes plus two reasons classes. Classes will relate to a variety of projects, including clothing, foods, and consumer issues.

3. Superintendent or Assistants will be on hand to assist contestants. Parent assistance will be allowed for those participating for “experience” only. All others are competing for premium monies and may only receive assistance from contest officials. Those talking with other contestants or receiving outside assistance will be disqualified.

DIVISION M - NOTEBOOKS, POSTERS & DISPLAYS

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

General Rules:

1. State Fair does not have classes for most of the exhibits in this division.

Check with your club leader or the Extension Office for information on State classes.

2. Please designate on entry tag what project you are entered in and made your poster, notebook or display for. Member must be enrolled in the project area exhibiting in.

Section I – Notebooks - (enter exhibits here, unless there is a special class listed under your project area)

1. Entry tags should be taped by a short string in the upper right-hand corner of the inside back cover of all notebooks.

2. All club officer notebooks should be on display. Records are to be complete up to July.

3. Notebooks will be judged on current year's work only.

4. Notebooks and Displays will be judged on the following points:

Stopping Power 15

Is the main idea specific? Is the idea presented clearly, simply, forcefully?

Interest, Holding Power 15

Does the exhibit give the observer additional facts in a clear, concise, informative way?

4-H Project Application 15

Is the subject matter an effective showcase?

Mechanical Power 5

Correct letter size, pleasing color combination, appropriate symbols, and models

Personal Growth 25

How much knowledge was gained by exhibitor? Was enthusiasm shown?

Educational Value 25

Knowledge shared. Note: Credit all citations, websites or other resources used in creating your exhibit.

Club Notebooks

Class 1 Secretary's notebook

Class 2 Treasurer's notebook

Class 3 Reporter's notebook

Class 4 Historian's notebook and Club Memory book

Class 5 Club Project notebook (recreation, conservation, safety, etc.)
Summary of current year's work should be included.

Class 6 Project/Curriculum notebook (conservation, health, safety, self-determined, etc.) Members may exhibit a notebook for each project in which they are enrolled. Included introduction and summary of goals set and activities planned and accomplished in project. Pictures pertaining to member's project are suggested.

Class 7 4-H Memory Book or scrapbook

Section II – Posters – (enter exhibits here, unless there is a special class listed under your project area)

1. Posters are limited to 22" x 28". Must be able to attach poster to wall for display, do not use items on poster that cannot hang.

2. Attach a string to the entry tag. Tape entry tag to upper left corner on the back of the poster.

3. Posters will be judged on the following points:

General Appearance	30
Information	50
Organization	20

Class 8 Promotional poster (promote your project).

Class 9 Educational poster (educate public about a subject)

Section III – Educational Display - (enter exhibits here, unless there is a special class listed under your project area)

1. Individual educational exhibits are limited to 24" wide by 30" deep. If additional space is needed, make prior arrangements at the Extension Office one week before the fair.

2. Care should be taken to select durable materials that will withstand fair conditions.

3. Entry tags should be attached to a main part of the display.

4. Scorecard for educational is listed above in the Notebook description.

Class 10 Club project or activity exhibit.

Class 11 Educational/Creative exhibit
(educate the public about your project).

Class 12 Project Accomplishment Display (for projects where no other class for exhibit is offered. A written summary or explanation of the project is recommended but not required.) Articles are show at exhibitor's risk.

DIVISION N - PHOTOGRAPHY

SUPERINTENDENTS: Christy Befort & Amy Wasinger

ASSISTANT SUPERINTENDENTS: Danielle / Levi / Kaylee Schumacher, Marisa Wasinger

SPECIAL RULES

1. Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the Fair to visit with a judge on Monday, July 12. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.
Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.
2. Each exhibitor is limited to two entries per class.
3. Photographs entered must be the result of the current year's project work by the 4-H member. Photos must be taken by the 4-H member.
4. Remove white border from the photo print before mounting.
5. All photos must be no larger than 8" x 10" and no smaller than 7"x 9", after trimming.
6. 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. The Extension office has matte boards available for purchase.
7. 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.
8. A full coverage permanent mount (spray adhesive recommended or heat mount) must be made. by using photographic adhesive. Each photo is handled numerous times (up to 25) throughout the judging, sorting, and display process.
9. The Kansas State Fair 4-H Photography ID Form (available from your Extension Office and online) must be used and mounted correctly on the bottom front of the matte board.
10. No lettering, including dates, is permitted on the front of the mount or on the photo. Only the Kansas State Fair 4-H Photography ID Form is to have lettering on it. No underlay or borders are to be used.
11. On the back of the mount, write; the exhibitor's name, photo class, and the Extension Unit (Cottonwood District - Hays).
12. Improperly mounted photos, oversize or undersize photos or photos with the white borders not removed or lettering (including dates) on the photo, will be awarded a ribbon one placing lower than the placing determined by the official judges.
13. Photographs taken with a digital camera and having no more adjustments than exposure, color intensity or correction, one click filter effects, red eye removal, cropping, dodging and burning should be entered in the standard color or black and white classes. HDR photos are to be entered in the standard photo class.
14. Digital Composite Image: Finished photo must be created from two or more original images photographed by exhibitor. HDR photos do not qualify for this class Photos will be judged on photographic merit as well as manipulation technique and process. Ribbon placement will be determined by combining the score of each judging section.

15. The black and white classes are for black and white prints only. Monochromatic prints, including sepia prints are considered color photos and must be entered in the appropriate color photo class.

16. Appropriate photo subject matter: Photographic subject matter is expected to follow 4-H standards. For a sense of prohibited subject matter, review the Kansas 4-H member Code of Conduct; in general, if it is not allowable at a 4-H event, it is not allowable in a 4-H photograph at the State Fair.

17. Photos with live subject(s) on railroad right of way or taken from railroad right of way property will not be displayed in Kansas 4-H Photography and will be disqualified and not judged.

18. Copyright protections must be observed.

***Class 1** Color photos taken by a 4-H member with 3 years or less in the project.

***Class 2** Color photos taken by a 4-H member with 4 – 7 years in the project.

***Class 3** Color photos taken by a 4-H member with 8 or more years in the project

***Class 4** Black and white photos - all levels of experience (Black and white prints only)

***Class 5** Digital Composite Image - Photo must be created from two or more originals taken by the exhibitor. Exhibitor must include a second 11 x 12-1/2 matte board (Explanation Board) mounted with standard size prints of the original photos, 3 x 5 card(s) explaining what manipulation was done and a standard size print of the final photo. Optional, may include prints of editing steps. Photos showing editing steps may be layered. Please put name and Extension Unit on the front of the second board. Explanation Boards will be displayed along with the finished board. Place both matte boards in the same protective plastic bag.

Class 7 Album of 15 to 26 snapshots

Class 8 Sequence of three or more pictures that together tell a story or cover an event. Display any way in regard to size or print, shape, color, etc. Mount on a 16” x 20” piece of poster board to be hung vertically or horizontally.

Class 9 This is Ellis County! This special “county only” class will feature the participant’s view of what makes Ellis County unique. Top exhibits in the class will be featured on the Ellis County 4-H website and / or Facebook page. Follow the general exhibit rules for entry.

***Class 10** Growth Portfolio

1. Member must have been enrolled in Photography project for five (5) years or more.

2. Exhibit will consist of 5 (five) photos - one from each of the past 5 years of enrollment. Each photo must have been created in a different year and must be labeled with year taken and which year of enrollment it represents.

3. Photos must be 8” x 10” and may be color or black and white.

4. An information sheet must accompany each photo giving brand and model of camera used to create the photo. The settings for focal length, aperture, mode and shutter speed must also be listed.

5. Skill set used to create the photo must be given and explained. Main goal for each year should be listed.

6. Beginning with photo 2, member description of GROWTH in project skill must be included on information sheet.

7. Exhibit will consist of photos arranged in chronological order of enrollment, information sheet on each photo, and all information listed in #6 and #7. A portfolio book will be required.

***Class 11 – Career Portfolio**

1. Member must have been enrolled in Photography for 5 (five) or more years OR member must be age 15 -19 and been enrolled in photography for at least two (2) years.

2. Exhibit will consist of ten (10) 8 x 10 photos showing skill development in one of the following photography areas: Portraiture, Special Effects (not done with computer), Landscape, Photo Journalism, Black and White, Nature/Wildlife or Graphic Design (computer skills with photos). Photos may have been created over multiple project years.

3. Photos may be color except if Black and White option is chosen.

4. An information sheet must accompany each photo giving brand and model of camera used to create the photo. The settings for focal length, aperture, mode and shutter speed must also be listed.

5. A one-page summary should accompany the portfolio listing the goal for pursuing this area of photography and what skills were learned while doing so. Mentors should be acknowledged. Career exploration can also be described.

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

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

DIVISION O - PLANT SCIENCE
CO-SUPERINTENDENTS: Allen & Nic Park

CROPS

SPECIAL RULES

1. Exhibits are to be as mature as possible. In case grain sorghums are not headed out by fair time, club members shall bring 5 of the maturest stocks, no roots, bundled for the exhibit.

2. On the 1-gallon samples, a hollow core may be placed in the center of the jar.

3. An exhibitor may make one entry in each class.

Register your entries into the faireentry.com system by the Fair entry deadline.

Check in items on Tuesday, July 13, 8:00 – 9:00 a.m. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

Corn

***Class 1** White, 10 ear exhibit

***Class 2** Yellow, 10 ear exhibit

Class 3 Forage corn, (Not eligible for State Fair)

Sorghum

***Class 4** Hybrid grain sorghum (name of hybrid) 10 heads or 5 of most mature stalks. No roots.

***Class 5** Hybrid forage sorghum (name of hybrid) 10 heads or 5 of most mature stalks. No roots.

***Class 6** Other forage sorghum (name the variety) 10 heads or 5 of most mature stalks. No roots.

Wheat

***Class 7** Hard white wheat, variety or hybrid must be named. One-gallon jar sample.

***Class 8** Hard red winter wheat, variety or hybrid must be named. One-gallon jar sample.

Other

***Class 9** Oats - exhibit to consist of one-gallon jar sample.

***Class 10** Barley - exhibit to consist of one-gallon jar sample.

***Class 11** Alfalfa seed - exhibit to consist of one-gallon jar sample.

***Class 12** Alfalfa - exhibit to consist of one standard bale of hay.

***Class 13** Others - exhibit to consist of one-gallon jar sample of seed or 10 heads from current project. Variety must be named.

***Class 14** Educational Wheat Booth. Booth planned and prepared by 4-H member enrolled in the wheat variety plot project.

***Class 15** Weed Control Exhibit, Exhibit consists of the four items below.

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

2. Prepare a list of the weeds mounted, showing common name, scientific name, and where it was found. Place the list in a specially identified section of the scrapbook.

3. Collect and identify weed seeds found in crop seeds. Mount them for display purposes. Place them in a specially identified section of the scrapbook.

4. Write a story on "How We Control Weeds on Our Farm" if you live on a farm. Other members write "How We Control Weeds at Home". The story should be about 300 words in length. It must show definite methods used to control weeds. Place the story in a specially identified section of the scrapbook.

**HORTICULTURE
SPECIAL RULES**

1. Register your entries into the fairentry.com system by the Fair entry deadline.

Check in all horticulture items on Tuesday, July 13, 8:00 – 9:00 a.m. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and grown. *Exhibitors are encouraged to attend a group consultation at 1:00 p.m. at*

the horticulture department.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

2. All horticultural exhibits must be grown by the exhibitor.

3. Quality and condition of exhibit will be considered. Choose vegetables for exhibit that will hold up well during the fair. Avoid over-ripe or over-mature specimens. Those that are slightly under-ripe or slightly immature when picked may last longer.

4. For information on how to prepare vegetables for exhibit, consult extension publication, “Exhibiting and Judging Fruits and Vegetables”, available at the Extension Office. <http://www.bookstore.ksre.ksu.edu/pubs/c405.pdf>

5. Use sturdy paper plate, cardboard box or other container with short sides for vegetable exhibits. Coordinate size of exhibits with size of the container.

6. Carefully attach entry tag to plate with a string (6 inches long after tying) tied through a hole punched near the edge of the container or can be tied around vases and planters.

7. Exhibitor is responsible for watering houseplants.

8. Entries limited to one per class in classes 17-46; and two per class in classes 47-55.

9. All plant materials must be grown and/or collected by the exhibitor, not purchased.

10. A county fair exhibitor earning a purple ribbon for a particular type of vegetable (i.e. early peas) is eligible to exhibit another vegetable (i.e. late pumpkin) at the State Fair).

Garden

***Class 18** Garden display - Exhibit consists of 5 different types of fresh vegetables and / or fruits as listed below. Canned products and shelled vegetables are not acceptable. Only one variety of each type of vegetable or fruit may be exhibited. Each exhibitor in this class will be limited to 4 square feet of space. Display should be exhibited in a tray, basket or container that can be easily moved. Exhibit consists of five different fresh vegetables or fruits.

Large Vegetables: (One each)

Watermelon • Eggplant • Squash • Cabbage • Large Pumpkin • Cantaloupe

Medium Vegetables: (Five each)

Cucumbers • Parsnips • Tomatoes • Okra • Carrots • Beets • Decorative Gourds • Peppers • Onions • Potatoes • Mini Pumpkins • Radishes • Sweet Potatoes (or similar sized vegetables)

Small Vegetables (12 each)

Green Snap Beans • Wax Beans, English Peas, or other

Small Fruits: (One half pint box)

Strawberries • Blackberries • Raspberries, etc.

Tree Fruits: (Five each)

Apples • Pears • Peaches, Grapes (2 bunches), etc. If small, fresh vegetables, such as green beans or peas, are used as one of the five different vegetables, a dozen is

suggested as a good display. Shelled vegetables should not be exhibited.

Grapes: (Two bunches)

- ***Class 19** Plate of 5 tomatoes
- ***Class 20** Plate of 5 cherry tomatoes
- ***Class 21** (5) Red potatoes (variety should be named)
- ***Class 22** (5) White potatoes (variety should be named)
- ***Class 23** (5) Russet potatoes (variety should be named)
- ***Class 24** (5) Sweet potatoes (variety should be named)
- ***Class 25** Plate of 5 slicing cucumbers – leave 1/4” – 3/8” of stem intact
- ***Class 26** Plate of 5 pickling cucumbers – leave 1/4” – 3/8” of stem intact
- ***Class 27** Plate of 12 beans, green snap
- ***Class 28** Plate of 12 beans, yellow wax
- ***Class 29** Plate of 5 table beets
- ***Class 30** Plate of 5 carrots
- ***Class 31** (1) Eggplant
- ***Class 32** (1) Cantaloupe or 1 muskmelon
- ***Class 33** Plate of 5 turnips
- ***Class 34** (1) Watermelon
- ***Class 35** (1) Pumpkin
- ***Class 36** Plate of 5 white onions
- ***Class 37** Plate of 5 yellow onions
- ***Class 38** Plate of 5 red onions
- ***Class 39** Plate of 5 bell peppers
- ***Class 40** Plate of 5 peppers, not bell type
- ***Class 41** Plate of 5 okra
- ***Class 42** 1 Summer squash
- ***Class 43** 1 Winter squash
- ***Class 44** 1 Head of cabbage
- ***Class 45** 1 Head of dill
- ***Class 46** Fresh Culinary Herbs (6) Ex. Parsley, basil, dill, etc. Six stems (or a comparable quantity) of ONE VARIETY of fresh herbs exhibited in a disposable container of water. Dried herbs are not accepted.
- ***Class 47** Miscellaneous - any other vegetable
- ***Class 48** Small fruits (one half pint box) Ex. Strawberries, blackberries, raspberries, or other similar sized fruits. (if other, please include name of fruit on entry.)
- ***Class 49** Tree fruits (plate of 5) Ex. Apples, pears, peaches, or similar sized fruits
- ***Class 50** Grapes (plate of 2 bunches)
- ***Class 51** Horticulture Notebook - Entry shall consist of a notebook or three ring binder of written narrative describing a horticulture project such as a landscape design, landscape installation, lawn renovation, water garden, flower garden, vegetable garden, lawn mowing service, landscape maintenance business, farmer’s market business, or other horticultural project. 4-Hers are encouraged to include photographs, illustrations and/or landscape drawings that help explain work done by the member. Photos taken from the same location before, during and after the

completion of the project are particularly helpful. Horticulture notebook scoring is as follows: Organization and General Appearance (neat, includes title page and table of contents, original, creative, etc.) 20%, Narrative (including goals, successes, failures, etc.) 40%, General Content (subject matter, photos, maps, knowledge gained, etc.) 40%.

Flower and House Plants

Each member may make two entries in each class. Flower materials must be grown and/or collected by exhibitor, not purchased.

Class 52 Garden flower, single stem, perennial

Class 53 Garden flower, single stem annual

Class 54 Fresh Flower arrangement, (Flowers must be grown by 4-H'er)

Class 55 Dried Flower arrangement, no fabric or plastic materials (Flowers must be grown by 4-H'er)

Class 56 Terrariums

Class 57 House plants

DIVISION P - SHOOTING SPORTS

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

Register your entries into the fairentry.com system by the Fair entry deadline.

Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

SPECIAL RULES

1. A member may make only one entry in this division.

2. Exhibits in this division are open to educational displays or promotional posters.

Exhibits in this division are open to educational displays or promotional posters.

Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Take care to select durable materials to withstand Fair conditions. **Entries will prominently incorporate the 4-H Clover with KSRE co-branding and should include the Kansas 4-H Shooting sports emblem. Failure to do so will penalize entry one ribbon color.**

3. The educational display must be the standard tri-fold 4'X 3; no additional table space available for promotional brochures or display items; content not to exceed display board borders.

4. Promotional posters: must be flat and no larger than 22"x 30". THE EXHIBIT SIZE RULE WILL BE STRICTLY ENFORCED! Exhibits exceeding the size guidelines will be penalized one ribbon color.

5. Notebooks – must be displayed in an 8 ½"X11", 3-ring binder.

6. EXHIBITORS MUST COMPLY WITH STATE AND FEDERAL LAWS AND FAIR MANAGEMENT POLICIES. **No "live" ammunition** containing propellant or explosive powders may be used in any display! An inert substitution must be

used in lieu of powder and “live” ammunition. The substitution must be clearly described on the back of the poster, display or in the notebook.

7. Name, county, age and year in project should be in a prominent location on the exhibit.

8. Educational displays and posters judged on the following criteria:

Stopping Power	15
Interest, Holding Power	15
4-H Project Application	15
Mechanical Power	5
Personal Growth	25
Educational Value	25

***Class 1** Educational Display. Must be directly related to the Shooting Sports project. (standard tri-fold boards only, no larger than 3’x4’)

***Class 2** Promotional Poster- Must promote 4-H Shooting Sports (Flat poster no larger than 8 1/2”x 11”) See #2 under special rules.

*** Class 3** Notebook. Contents pertain to some phase, results, story or information about 4-H Shooting Sports. (No larger than 8 ½ x 11”)

DIVISION Q – 4-H STEM

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

Register your entries into the faireentry.com system by the Fair entry deadline.

Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time ahead of the fair to visit with a judge on Tuesday, July 13. If a 4-H’er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judge’s discretion, will receive a participation ribbon.

For ALL notebooks, display boards, and posters:

1. No additional exhibit information is required; no manila envelope is needed for these exhibits.
2. Exhibits in posters, notebooks and display boards must contain substantial supporting educational materials.
3. Educational display boards, posters and notebooks should be creative and showcase details about the knowledge learned in the project during the current 4-H year. Value is placed on youth who can demonstrate how their skills have increased while completing the project. Each exhibit will be judged on uniqueness, creativity, neatness, accuracy of material, knowledge gained, and content. An exhibit judging score sheet will be available at www.STEM4KS.com. For example, a rocket that may have crashed and/or is highly damaged may be made into an educational display or poster that tells a great story with many lessons learned.
4. Follow copyright laws, citing all sources of information in a standard notation.

Sources of scientific information must be cited on the front of your exhibit, including all posters and educational display boards.

5. Educational displays are not to exceed a standard commercial 3'x 4' tri-fold display board. No card table exhibits will be allowed. Care should be taken to use durable materials that will withstand Fair conditions.
6. "Construction Kits" that are part of Educational displays must be contained in cases (tackle boxes, sealable containers, etc.) that may not be larger than 1' X 2' X 2' and must have a latch which securely keeps all components contained in the "Construction Kits". Other components are to adhere to appropriate dimensions as stated elsewhere.
7. Educational Project notebooks must be organized in a 3-ring binder.
8. Educational posters must be no larger than a 20" X 30" poster board. Any three-dimensional display exhibits may not be thicker than 1".
9. Engines and igniters in rockets ARE NOT permitted with the exhibit and constitute an immediate disqualification. This is for safety reasons and includes both spent and live engines.
10. Exhibitor's name, county or district, age, and year(s) in project must be tagged or labeled in a prominent location on the educational display, notebook, "Construction Kit," and/or poster.
11. Exhibits should possess the following qualities (in no particular order):
 - a. A Central theme
 - b. What you want others to learn
 - c. Be designed and constructed in a manner befitting the exhibit
 - d. Be something you are interested in
 - e. Be related to model or high-power rocketry, astronomy, robotics or UAS
 - f. As well as those characteristics described above.

ASTRONOMY

1. Member must be enrolled in the 4-H STEM - Astronomy project. Exhibit must have been completed during the current 4-H year.
2. Telescopes entered in this division may be built from a kit or by original design. Pre-finished telescopes which require no construction or painting are not acceptable exhibits.
3. Telescopes are limited to no more than six feet in length. They must be placed on a stationary stand that does not allow the telescope to roll and/or fall over. The stand cannot extend past two feet in length or width.
4. Each telescope exhibit must include a "4-H Astronomy Exhibit Information Form," which should be rubber cemented onto the outside of a 10" x 13" manila envelope. You must also include construction plans (or a photocopy) of the telescope and place it inside the manila envelope.
5. 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.
6. The telescope must be properly assembled and painted with a smooth and uniform finish. Decals, if used, should be attached smooth and tight.

7. Telescopes designed by the exhibitor must be original, not a modification of an existing kit. Exhibitor's name, county or district, age, and year(s) in project must be tagged or labeled in a prominent location on the telescope.

- *Class 1 Telescope made from kit
- *Class 2 Telescope made from original design
- *Class 3 Astronomy Educational Display
- *Class 4 Astronomy Educational Notebook
- *Class 5 Astronomy Educational Poster

COMPUTERS

1. The 4-H computer project teaches concepts related to computers, hardware knowledge, software programming and applications, internet safety, the building, maintenance and repair of computers and future career opportunities. Please note that the actual construction of computer hardware (i.e., building a computer, electronic devices with a mother-board based manipulation) will remain in the Energy Management division.
2. The 4-H members must be currently enrolled in the 4-H STEM – Computers project to exhibit in this division.
3. Each exhibitor may enter one exhibit per class. Exhibit must have been completed during the current 4-H year.

- *Class 6 Computer Educational Poster
- *Class 7 Computer Display Board
- *Class 8 Computer Notebook

COMPUTER SYSTEMS

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

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

1. All exhibits must be self-contained on a USB drive (thumb drive, flash drive, jump drive, or other any other name for a small USB storage device; the rules will use “USB drive”). This means that a judge can plug in the USB drive into a computer and be able to run the exhibit as described below.

OR

b. System-On-A-Chip (SOC) (such as Raspberry Pi) or a Micro-Controller (such as an Arduino or Ozobot) AND is a compact (less than 4-8”X4-8”X4-8”) system, which can be programmed AND requires minimal assembly to operate (e.g. connecting power, display, and keyboard/mouse cables). Referred to as a “chip system” through the rest of the rules.

2. Physical computers such as tablets, smart phones, laptops, or personal computers (PCs) as an exhibit will not be accepted as an exhibit.

3. “Chip systems” may use/include GPIO bread boards or HATs (Hardware

Attached on Top) the size of which is not included in the size of the chip system, however the total size of the chip system and GPIO devices may not exceed 24”X24”X24” including any protective enclosures.

4. Any attached GPIO devices are not judged for electrical construction or quality as this division is focused on the operational aspects of the systems that have automated articulated structures (arms, wheels, grippers, etc.) which the exhibitor constructed, can also be classified as a robot, and the exhibitor must decide which division to exhibit in as the exhibit may not be entered in the both divisions.

5. For chip systems, all electric components of the system must be adequately covered or concealed with a protective enclosure. Paper is NOT considered an adequate enclosure or covering for the electrical components.

6. All revisions of all forms previously released for the STEM division either undated or dated prior to 2016 are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year. Use of old forms will result in the loss of one ribbon placing for exhibits.

7. For all computer system entries, the following items are required as part of an exhibit packet:

a. A manila envelope with the Computer Exhibit Form attached to the front, this form can be downloaded at www.STEM4KS.com .

b. A USB drive labeled with the 4-Hers name, county/district, and club; in a way that does not prevent it from being plugged into a computer.

c. For exhibits that are entered on USB drives, at least one (1) graphic (picture, screen shot/capture, slide, etc.) of the project must be printed out on an 8.5” X 11” sheet of standard computer paper, placed in a plastic sheet protector, to allow for proper display and recognition. This is what will be displayed during the fair. On the back side of the graphic the 4-Her’s name, county/district, and club should be listed.

d. Instructions to run any part of the exhibit on the USB drive.

(There should be at least three (3) items in your manila envelope: USB drive, graphic and instructions).

8. Each exhibit must be accompanied by a “4-H Engineer’s Journal.” The engineer’s journal should be typed. It can either be included electronically on the USB drive (preferred) or printed and placed in the manila envelope.

a. The “4-H Engineer’s Journal” should start with a dated entry describing what the 4-H member is trying to accomplish/build.

b. The “4-H Engineer’s Journal” should conclude with a dated entry describing what the 4-H member achieved in creating. (The start and end many times will be different. The judges are interested in the journey).

c. Additional entries in the “4-H Engineer’s Journal” should be made as progress occur describing successes and failures; as well as the steps done and any sources of information including links used.

d. Pictures can also be included in the “4-H Engineer’s Journal” but should not be more than 50% of the entries.

e. The “4-H Engineer’s Journal” should contain at least one graphic.

f. The “4-H Engineer’s Journal” must be at least 3 pages in length.

g. An example of a “4-H Engineer’s Journal” can be found at www.stem4KS.com .

h. The “4-H Engineer’s Journal” will comprise 50% of the overall exhibit score.

Failure to include a “4-H Engineer’s Journal” will result in the exhibit being disqualified.

9. If the exhibit is a program, application, app, web site, or requires any coding, the source code must be included on the USB drive. Failure to include a copy of the “source code” may result in up to one ribbon place deduction.

10. Diagrams or decision trees showing the logical flow of the system must be included on the USB drive for all exhibits.

11. A set of instructions must be provided to run the computer system/application. These instructions should be printed off and included in the exhibit package and a copy should be included on the USB drive.

a. It is recommended that 4-Hers bring a computer that will run their project to the fair for judging as judges typically do not bring computers with them. Operating instructions are still required.

b. Instructions should be written as though you were helping a less techy person, (like a grandparent) use the USB drive with a computer similar to what is described in rule 9 below. An example of instructions can be found at www.stem4KS.com .

12. Each exhibit MUST include a video of the youth following their instructions for operation. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on the USB drive. These videos may also be considered for inclusion in a running video loop in the STEM area at the state fair after review by judges, superintendent(s), and extension staff. Adult guardians must complete the video release included with the exhibit form. If the release is not completed the video will not be included in the video loop on display in the STEM area at the Kansas State Fair.

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

14. 4-Hers should not assume that the computers have Internet connectivity and that any parts of the exhibit that require Internet access will not work. It is strongly recommended that 4-Hers test exhibits on a computer with Internet connectivity disabled.

15. Kansas 4-H STEM has made available Linux Virtual Machines (VMs) that can be downloaded and used to create projects on such as web servers, networking, and many other projects. For more information on how these VMs can be leveraged or to download them visit www.stem4KS.com . 4-Hers are not required to use the VMs in their projects. They are optional.

16. All licensing should be adhered to for any software used in the exhibit. Failure to do so will result in a reduction of one ribbon placing.

17. The creation of viruses, malware, malicious applications or code, defamatory language or graphics, bullying, or any material that is “mean,” “dangerous,” or harmful according to the judge’s opinion will result in the exhibit being disqualified.

18. Pictures or still graphics created are not eligible for entry as a project in this division and should be entered in the appropriate photography division.

19. Judging will be based on a score sheet which can be found at www.stem4KS.com . There are four (4) areas each exhibit will be judged on. They are:

- a. 4-H Engineers Journal (what I learned to make it work), 50% overall score
- b. Instructions (how I help others make it work), 25% overall score
- c. Functionality (does it work), 12% overall score
- d. Diagrams (and code if applicable) (how I think it works), 13% overall score

COMPUTER SYSTEMS

***Class 9** 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.’)

***Class 10** Computer presentation (power point, web page/site, animated graphics, etc.)

***Class 11** Single computer system (web server, database server, etc.)

***Class 12** Networked system consisting of two or more computers

***Class 13** Chip system- a small (4-8”X4-8”X4-8”) programmed physical device that accomplishes a specific task

ROBOTICS

1. Member must be enrolled in the 4-H STEM – Robotics project. Exhibit must have been constructed / completed during the current 4-H year.

2. Each robot must be free-standing, without the need for additional supports in order to be moved or exhibited. Each exhibit must include a robot, information packets are not a sufficient exhibit.

3. Robots must have automated articulated structures (arms, wheels, grippers, etc.). Game consoles that display on a screen are not considered robots and should either be entered in computer systems division or energy management project. Robots requiring no assembly, just programming, such as Ozobots, are considered computer systems projects as the skill is focused on the programming not on the construction of the robot.

3. Robot dimensions should not exceed 2 feet high, by 2 feet wide, by 2 feet deep. Weight may not exceed 15 pounds. If displayed in a case (not required or encouraged) the outside case dimensions may not be more than 26 inches in height, width, or depth.

4. Materials including but not limited to obstacles, spare batteries, and mats for testing the robot may be placed in a separate container, which is not included in the robot’s dimensions, that container may not be larger than 576 cubic inches as measured along the outside of the container. (Examples: 4”X4”X36” or 4”X8”X18” or 6”X6”X16) The container, if used, and/or any large objects (such as mats or obstacles) should be labeled with the exhibitor’s name(s) and county or district.

5. All electric components of the robot must be adequately covered or concealed with a protective enclosure. Paper is **NOT** considered an adequate enclosure or covering for electrical components.

6. Robots may be powered by an electrical, battery, water, or solar source only. Robots powered by fossil fuels/flammable liquids will be disqualified. **Robots that include weaponry of any kind will be disqualified.** Weaponry is defined as any instrument, possession or creation, physical and/or electrical that could be used to inflict damage and/or harm to individuals, animal life, and/or property.

7. Remote controlled robots are allowed under certain conditions provided that the

robot is not drivable. Robotic arms (hydraulic or electric) are allowed. A remote is allowed provided more than a single action happens when a single button is pressed on the remote, for example “a motor spins for 3 seconds, at which point an actuator is triggered, then the motor spins for 3 more seconds.”

8. Each robot must be in working condition. The judges will operate each robot to evaluate its workmanship and its ability to complete the intended tasks. In the event the robot uses a phone, tablet, or similar device for programming AND control of the robot a video will be used to evaluate the working condition of the robot. Each exhibitor is required to complete the “4-H STEM Robotics Exhibit Information Form” which is available through your local K-State Research and Extension office. This form must be attached to the outside of a 10” x 13” manila envelope. For notebooks, display boards, and posters, no additional exhibit information is required; not manila envelope is needed for these exhibits.

9. The exhibit must include written instructions for operation (the instructions should be written as if they were to tell a grandparent or elderly person how to operate the robot), construction plans, and one to three pages of project photographs. In addition, a 5-minute video presentation placed on a CD, DVD, USB drive, or similar removable storage device, if applicable. For robots that can be programmed programming information must be included. This information should be placed inside the 10” x 13” manila envelope mentioned above. The exhibitor may enter their electronic project listed under the energy management program if the exhibitor so chooses.

10. In the event that the robot uses a device like a phone, iPad, or tablet for programming AND operation, DO NOT include the device (phone, tablet, etc.). The device’s safety cannot be insured. Instead record a video demonstrating the instructions included for your robot. It should show, setting up the robot, starting the robot, the robot executing its task, and powering off the robot, just like the instructions are written.

11. Each exhibit MUST include a video of the youth following their instructions for operation. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on the CD, DVD, USB drive, or similar. These videos may also be considered for inclusion in a running video loop in the 4-H STEM area at the state fair after review by judges, superintendent(s), and extension staff. Adult guardians must complete the video release included with the exhibit form.

12. 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 Rubik’s cube, sorting colors, or climbing stairs.

13. Exhibitor’s name(s) and county must be tagged or labeled in a prominent location on the robot.

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

***Class 25** Robot made from a commercial (purchased) kit.

***Class 26** Robot designed and constructed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan.

***Class 27** Programmable robot made from a commercial (purchased) kit.

***Class 28** Robot designed and constructed by exhibitor, that is operated by a remote-controlled device

***Class 29** Junk Drawer Robotics – based on robotic curriculum

***Class 30** Educational Display, Notebook or Poster

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

***Class 31** Robot made from a commercial (purchased) kit. (No programming, just assembly)

***Class 32** Robot designed by exhibitor. The robot must not be a modification of an existing robot kit or plan.

***Class 33** Programmable robot made from a commercial (purchased) kit.

***Class 34** Robot designed and constructed by exhibitor, that is operated by a remote-controlled device.

***Class 35** Junk Drawer Robotics – based on robotic curriculum

***Class 36** Educational Display, Notebook or Poster

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

***Class 37** Robot made from a commercial (purchased) kit.

***Class 38** Robot designed by exhibitor. The robot must not be a modification of an existing robot kit or plan.

***Class 39** Programmable robot made from a commercial (purchased) kit.

***Class 40** Robot designed and constructed by exhibitor, that is operated by a remote-controlled device.

***Class 41** Junk Drawer Robotics – based on robotic curriculum

***Class 42** Educational Display, Notebook or Poster

Division D – Team Robotics Project

***Class 43** Robot designed and constructed by 2 or more 4-H STEM project members. The robot must not be a mere modification of an existing robot kit or plan. This division is designed to encourage teamwork and cooperation among fellow 4-H STEM members. The robot may be a programmable type that is made from a commercial (purchased) kit. As with many high-tech projects today, no one person designs and builds a robot alone. It takes the brainstorming, planning, problem solving, and cooperation of an entire team to complete a given robotics project.

***Class 44** Team Educational Robotics Display, Notebook or Poster

ROCKETRY

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

1. As defined by the National Association of Rocketry (NAR), a scale model is “any model rocket that is a true scale model of an existing or historical guided missile, rocket vehicle, or space vehicle.” The intent of scale modeling is, according to the NAR, “to produce an accurate, flying replica of a real rocket vehicle that exhibits maximum craftsmanship in construction, finish, and flight performance.” (NAR “Pink Book” 50.1 4-1)

2. Adult supervision is defined as being under the direct supervision of someone 18 years of age or older.
3. For the purposes of Kansas 4-H STEM, a **mid-powered** rocket is defined as a rocket that uses an ‘E’, ‘F’, ‘G’, or equivalent engine for launch. In addition, rockets also qualify for mid-power if they meet any of the following criteria:
- a. Is 2 inches or greater in diameter (not including fins) and taller than 3 feet (36 inches including fins) and do not use an engine(s) exciding 160.01 Newton seconds of total impulse (an ‘H’ engine equivalent or above).
 - b. Weighs more than 3.3125 pounds (53 ounces or 1500 grams) at the time of launch;
 - c. Uses an ‘E’ engine or larger to launch (2D’s, 4C’s, 8B’s, etc.);
 - d. The total impulse of all engines used in the rocket is greater than 20.01 Newton-seconds and less than 160.01 Newton-seconds.
4. For the purposes of Kansas 4-H STEM, 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; OR
 - b. Uses an ‘H’ engine or larger to launch, OR
 - c. The total impulse of all engines used in the rocket is greater than 20.01 Newton-seconds of thrust.
 - d. Models powered by rocket motors not classified as model rocket motors per NFPA 1122, e.g.:
 - e. The total impulse of all engines used in the rocket is greater than 160.01 Newton-seconds of thrust.
 - f. Includes any airframes parts of ductile, metal, though, the use of ductile metal is strongly discouraged.
 - g. Models powered by rocket motors not classified as model rocket motors per NFPA 1122, e.g.:
 - i. Average thrust in excess of 80.01 Newtons
 - ii. Contains in excess of 125 grams of propellant and are limited to only H and I motors.
 - iii. Uses a hybrid motor or a motor designed to emit sparks
5. High power certification is defined as having successfully completed a certification program for high-powered rocketry through the NAR or Tripoli and maintaining that certification. This applies to all membership levels in the NAR and Tripoli. Specifically, the “Formal Participation Procedure” for the “Junior HPR Level 1 Participation Program” as outlined by the NAR and the “Tripoli Mentoring Program (TMP) as outlined by Tripoli.
6. NAR rules for launching and construction of all rockets are assumed to be used by all 4-H STEM exhibitors and will be considered during judging.
7. For the purposes of Kansas 4-H STEM, NO rocket may be launched using engines totaling more than an ‘I’ impulse engine or 640 Newton-seconds of total thrust.

Exhibit Rules for ALL rocketry categories:

Purpose: These rules apply to how rockets are to be displayed at the fair and what those displays should and should not contain. These rules apply to all rockets displayed in the 4-H STEM division.

- 1.** 4-H members must be currently enrolled in the 4-H STEM-Rocketry program to exhibit in this division.
- 2.** Each exhibitor may enter up to two rocket exhibits that have been constructed during the current year. If two rockets are entered, one rocket must be a “model rocket kit”. A second may be entered into any other applicable class. An exhibitor may not enter two rockets in the same class.
- 3.** *The report that accompanies the rocket* must be limited to the 4-H STEM 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. The form may be downloaded from www.cottonwood.ksu.edu – County Fair Event Page. Be sure to use current forms. **Use of old forms will result in the loss of one ribbon placing.** Relevant documents may be obtained from the Extension Office, www.cottonwood.ksu.edu or from www.stem4KS.com
- 4.** Plans (or a photocopy) must be placed inside the envelope.
 - a. This includes original design rockets.
 - b. If a rocket kit has been modified structurally (Which must provide all necessary details to construct an original design rocket.), notations need to be given indicating the changes made, either by notations on the Rocket Exhibit Information Form or by placing notes in the plans. Such modifications require the rocket to be swing tested and documented to show a stable flight.
- 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 8 ½” x 11” page(s).
 - c. There must be at least 1 page of photos and no more than 5 pages of photos.
 - d. Include at least one photo showing rocket construction, preferably with the exhibit 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.
 - c. Support rods must remain in the upright position, 90 degrees to the display base, do not angle. If support rods are not perpendicular to the base, the judge should deduct two ribbon placings.
 - d. No model may be submitted on a launch pad.

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

8. If a fire burn ban is in effect in the county, participants are not required to launch their rocket(s) prior to the County Fair. All requirements for the launching of rockets for the State Fair and the documenting of the launching are suspended for the duration of the ban if it continues until State Fair entry.

9. All rockets must have a safe method of recovery, e.g., parachute, streamer or tumble recovery. Any rocket without a recovery system will be disqualified.

10. The altitude achieved by the rocket is to be determined using a method other than estimation. Examples of accepted methods include altimeter, computer software, range finders, etc. If additional space is needed to show calculations of how the altitude was achieved one additional page may be added to the rocketry information pack.

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

12. The judging of flight damage is to be secondary to all other aspects of the model and only then may it even be considered. However, under no circumstance may flight damage be grounds for disqualification.

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

14. If an engine becomes stuck, jammed, wedged, or in any other way permanently affixed in or to a rocket and cannot be removed from the rocket, the rocket will be subject to immediate disqualification. This is because it is not possible to make a full and immediate assessment of the safety of the rocket when it is being judged and safety is paramount.

15. Engines may not be used as display stands hollowed out or otherwise. Engines used as a display stand will be subject to immediate disqualification.

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

a. Multi-stage rockets can be displayed without having the stages connected together. In that case the final stage (the one with the nose cone) should be placed on the display stand, and other stages with a loop of string to the display stand.

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

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

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

18. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's rocket, at the judges' discretion, will receive a participation ribbon. All information necessary will be given to the NAR and TRIPOLI for investigation and possible revocation of membership.

Construction Rules for ALL Rocketry categories:

Purpose: These rules apply to the construction of all rockets displayed in the 4-H STEM division.

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

- 2.** Beginner kits with prefabricated fin assemblies and pre-finished rockets requiring no painting are not acceptable and will be given a participation ribbon.
- 3.** Plastic snap together fins and prefabricated fin assemblies that **do not** require fin alignment are not acceptable and will be given a participation ribbon.
 - a.** This rule does not apply to plastic fins that must be manually aligned and do not utilize a fin alignment mechanism, including, but not limited to fin alignment rings or spacing blocks.
 - b.** This rule does not apply to fiberglass, Kevlar, extruded foam, composite, or wood fins; especially when used for “through-the-wall” fin attachment techniques that are common in larger rockets.
 - c.** In addition, plastic parts for decorative and mechanical purposes (i.e. decorative nozzles and moving landing struts) are not considered fins and can consist of plastic. Decorative nozzles, etc. need to be securely fastened and not pose a safety hazard.
 - d.** Fin assemblies that are printed using a 3D printer are excluded from this rule. Thorough detailed instructions on the creation of the fin assemblies must be provided and an additional page of photos may be included to show the creation/printing of fin assemblies.
- 4.** Angles of fins must fall within a plus or minus 2-degree variation using an approved fin alignment guide (such as KSSTAC10). An official fin guide is available from <http://www.stem4KS.com>.
- 5.** Fins should be rounded or streamlined according to instructions. If the other edges are rounded to reduce drag on all exposed sides, there should be no ribbon deduction, unless instructions indicate to leave flat.
- 6.** Fins and body tubes are to be sealed with sanding sealer and/or primer to eliminate the appearance of body grooves and wood grain.
- 7.** Fins and launch lugs are to be filleted to reduce drag and properly secure them to the model.
- 8.** Engine mounts are to be securely attached to the body tube.
- 9.** Any seams on plastic parts are to be sanded smooth.
- 10.** Body tubes/airframes/engine mounts can be made from suitable materials, including, but not limited to: reinforced paper, cardboard, phenolic resin, specialized polymer resins, fiberglass, Kevlar, or other suitable structural materials. However, foam may not be used for external body or other external rocket parts.
- 11.** The nose cone is to fit snugly but still allow for easy removal.
- 12.** Exhibits must be uniformly painted and smoothly finished or finished as per rocket instructions, and have decals applied smoothly.
- 13.** Nonstandard surfacing (such as textured paint) may be used if directed by the instructions, this includes scratch-built rockets.
- 14.** Models may not be judged based on their paint scheme (colors and placement on the rocket), with the exception of rockets that fit the definition of a “scale model.” All other rockets do not have to follow the suggested paint scheme, allowing the 4-Her to display maximum creativity in the finishing of their rocket.
 - a.** Under no circumstances is the weight given to the paint scheme to be sufficient enough, by itself, to move the model from one ribbon placing to another.
- 15.** “Scale models” may be judged based on their paint scheme. The judge may deduct up to one ribbon placing for not following the paint scheme.

16. Scale Model Rockets are to be finished and completed with a majority (greater than 70%) of decals.

17. If a modification is made to the rocket, for example, adding a fin, a swing test must be conducted on the rocket, and the documentation provided. Failure to test and document flight stability following modifications will result in two ribbon placing deductions.

Model Rocketry Specific Guidelines (ages 7 and up):

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

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

Original Design Specific Rocket Guidelines (ages 11 and up):

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

- 1.** Original design rockets cannot be a modification of a pre-existing kit and must be of original design.
- 2.** Original design rockets must be designed by the exhibitor(s).
- 3.** Original design rockets must include detailed instructions, so that someone could construct the original designed rocket just like a kit purchased at a store. Instructions can be as many pages as needed to convey full and complete construction techniques.
- 4.** Original design rocket instructions should not include copies of instructions in part or in whole from existing kits.
- 5.** For a rocket entered in the original design classes, describe in the summary how the rocket was tested for stability prior to flying. Swing testing of the rocket is required. Other tests and calculations are encouraged. Exhibitors must include documentation of the swing test. Failure to swing test a rocket will result in a deduction of TWO ribbon placings.
- 6.** A minimum of one additional page must be added to the rocketry information pack detailing the test(s) performed to insure stability. 4-Hers are strongly encouraged to provide as much detail as possible. Failure to provide adequate written documentation will result in a disqualification.

***Class 45** Rocket made from kit. Include plans.

***Class 46** Rocket designed by exhibitor; not merely a modification of an existing kit. Include original plans and stability testing.

***Class 47** Scale Model Rocket made from kit. Include plans.

***Class 48** Scale Model Rocket designed by exhibitor; not merely a modification of an existing kit. Include original plans and stability testing.

***Class 49** Rocket designed by 2 or more exhibitors; not merely a modification of an existing kit. Include original plans.

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

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

1. Exhibitors must be at least 14 years of age by January 1 of the current year.

2. The rules for ALL categories apply.

3. In addition to the information packet completed for all rockets, a high/mid power information form is to be completed and placed inside of the information packet.

This may be downloaded from www.stem4KS.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 4-H STEM Action Team may review and implement the modified code.

6. All rockets in this division are to be launched under adult supervision by the 4-H member who constructed the rocket.

7. High power rockets as defined above ('H' or 'I' engines) may not be launched in this division.

8. If according to Federal Aviation Regulations Part 101, a waiver is required to fly the rocket, a copy of that waiver is to be attached to the High-Power Information Form. In the case where the launch was a public event a substitute to a copy of the waiver is the Range Safety Officers (RSO's) contact information.

9. Mid- Power rockets may be displayed without a supporting stand. If a supporting stand is used, it is not to exceed 4-1/4" (four and one-quarter inch) thick and 8" square. The exhibitor's name, county or district, and age must be labeled on the base.

Division E- Exhibitors 14 years and older

***Class 50** Mid-power rocket made from kit or original design.

Rocketry Educational Exhibits – Posters, Notebooks, and Displays

1. Exhibits may not consist of only a rocket, but must contain substantial supporting educational material in the form of posters, notebooks, or display boards, etc.

2. Displays should be creative and showcase something specific you have learned in the Rocketry project during the current 4-H year. For example, rockets that have crashed and/or are highly damaged that can't be launched again may be made into an educational display or poster that tells a great story with many lessons learned.

***Class 51** Educational Display, Notebook or Poster

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

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

1. Exhibitors must be at least 14 years of age by January 1 of the current year.
2. The rules for ALL categories apply.
3. In addition to the information packet completed for all rockets, a high-power information form is to be completed and placed inside of the information packet. This may be downloaded from [KS 4-H STEM](#) page. Click on KSF Packet link.
4. Exhibitors in this division must hold memberships in either NAR or Tripoli organizations.
5. The NAR High Power Rocket Safety Code applies to the construction and launching of all rockets displayed in this division. As such all exhibitors must comply with the NAR High Power Rocket Safety Code that is in effect as of October 1st of the current 4-H year. However, in the event that there is a modification in this code the 4-H STEM Action Team may review and implement the modified code.
6. All rockets in this division are to be launched under adult supervision by the 4-H member who constructed the rocket.
7. For rockets launched using an engine(s) that have 160.1 ('H' engine or equivalent number 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.
 - a. The 4-H member should also hold or be attempting to attain their level 1 high power certification and should include supporting documentation of such (a copy of Level 1 card is sufficient).
8. If according to Federal Aviation Regulations Part 101, a waiver is required to fly the rocket, a copy of that waiver is to be attached to the High-Power Information Form. In the case where the launch was a public event a substitute to a copy of the waiver is the Range Safety Officers (RSO's) contact information.
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.**

Exhibitors 14 years and older

*Class 52 High power rocket made from kit or original design

UNMANNED AERIAL SYSTEMS

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

1. Each exhibitor may enter one exhibit per class. Exhibit must have been completed during the current 4-H year.
2. The information that accompanies the UAS must be limited to the 4-H STEM

Exhibit Information Form which is affixed to a 10”X13” envelope. This envelope should NOT be attached to the UAS. This may be downloaded from www.stem4KS.com Any UAS exhibit not including this completed envelope will receive an automatic participation ribbon.

3. Each exhibit MUST include a video of the youth operating their UAS. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on the CD, DVD, USB drive, or similar. These videos may also be considered for inclusion in a running video loop in the STEM area at the State Fair after review by judges, chair(s) and extension staff. Adult guardians must complete Video Release included with the exhibit form.

4. Unmanned Aerial Systems that include or depict weaponry of any kind will be disqualified.

5. If modifications are made to the exhibit a page should be attached noting those modifications.

6. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judges’ discretion, will receive a participation ribbon.

***Class 53** Educational Display, Notebook or Poster

***Class 54** Unmanned Aerial System designed and constructed by exhibitor that is operated by a remote-controlled device. The UAS must not be a mere modification of an existing kit or plan. You may not exhibit a UAS that is purchased off the shelf in this class.

***Class 55** Practical application of an Unmanned Aerial System constructed from a commercial (purchased) kit. This includes the UAS, plus one or more of the following: video, notebook, poster, display board, etc. This class is separate from educational exhibits. A tangible use would be mapping Russian olive trees, eroded soils, and bindweed in fields, etc. There are also many other non-agricultural UAS uses that would be appropriate for this class.

4-H STEM - AG MECHANICS

The Ag Mechanics exhibit area is a new 4-H STEM – Ag Mechanics project for 2021. The project is starting with an emphasis on welding and smithing, it will expand as the project area grows. This project allows youth to explore areas of ag mechanics and metallurgy from repairing or repurposing items to the fabrication of new items.

- 1.** 4-H members must be currently enrolled in the Kansas 4-H STEM –Ag Mechanics (Welding) project to exhibit in this division.
- 2.** Each exhibitor may enter one exhibit per class. Exhibits must have been constructed or repaired during the current 4-H year.
- 3.** Total exhibit dimensions should not exceed 3 feet high, by 3 feet wide, by 3 feet deep. Total exhibit weight may not exceed 150 pounds (movable by a team of 2 people)
- 4.** Wheeled exhibits must utilize a breaking mechanism which prevents the exhibit from freely rolling while on display
- 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 demission’s

and weight of the exhibit as described previously. Exhibit boards should have a portable and moveable base. No exhibits may be staked to the ground for display.

6. Top heavy items should be braced or placed in a stand sufficient to prevent it from toppling over while on display.
7. Exhibits may not be bound, affixed, attached to buildings, except by the superintendent or Extension Staff.
8. Painting or spot painting is not allowed on projects after arrival on fairgrounds. If wet paint is detected by judges or superintendents one ribbon placing will be deducted.
9. Repair projects having adequate original finish need not be repainted
10. Cutting surfaces, such as blades or knives, are to have a protective covering over them to prevent injury. The covering should be easily removed and reinstalled for judging. Foam “pool noodles” and multiple layers of cardboard are acceptable.
11. 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.
12. If the exhibit is powered by flammable liquids (gas, propane, kerosene, etc.) the fuel tank and lines should be drained and allowed to dry, to avoid spills and potential fires.
13. Electric powered (battery, corded, solar, or alternative energy) should have a primary shutoff or disconnect switch.
14. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judges’ discretion, will receive a deduction in ribbon placement or a participation ribbon.
15. The exhibitor’s name(s) and county or district must be tagged or labeled in a prominent location on the display.
16. Each exhibit must include an Ag Mechanics information packet. Entry of just a packet without an accompanying exhibit is not a sufficient exhibit.
17. Each exhibitor is required to complete the “4-H STEM Ag Mechanics Exhibit Information Form” which is available through your local K-State Research and Extension office or at www.STEM4KS.com. This form must be attached to the outside of a 10” x 13” manila envelope. Do not tie the envelope to the exhibit.
18. Each exhibit information packet should include the following items: a. Bill of materials for the project with associated costs, 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 appropriate, schematics or working drawings relating to the creation or repair; d. If appropriate operating instructions
19. Additionally, exhibitors may create an optional video (not required) about their project showing its operation and the work they have done. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on a USB drive. These videos may also be considered for inclusion in a running video loop in the STEM area at the fair after review

by judges, superintendent(s), and extension staff. Adult guardians must complete the video release included with the exhibit form. If the release is not completed the video will not be included in the video loop on display in the STEM area at the Fair.

Introductory – Ag Mechanics (about 1 - 3 years of experience)

Must meet Kansas State Fair age requirements to advance.

***Class 60** Welding display board – a 3 foot by 3 foot display board with different pieces of metal attached illustrating different types of welds, each weld being labeled

***Class 61** Level 1 Welding ag repair – repair of ag equipment with welding

***Class 62** Level 1 Welding ag fabrication – creation of new ag equipment with welding

***Class 63** Level 1 Welding general repair –repair of non-ag equipment with welding

***Class 64** Level 1 Welding general fabrication – creation of non-ag equipment with welding

***Class 65** Level 1 Welding artistic fabrication – creation of artistic or interpretive pieces with welding

***Class 66** Level 1 Brazing repair

***Class 67** Level 1 Brazing fabrication

***Class 68** Smithing display board – a 3 foot by 3-foot display board with different pieces of forged metal attached illustrating different forms, each form being labeled

***Class** Level 1 Smithing – A design forged with at least one formed element (twists or spirals for example)

Experienced – Ag Mechanics (about 4 -6 years of experience)

***Class 70** Level 2 Welding ag repair – repair of ag equipment with welding

***Class 71** Level 2 Welding ag fabrication – creation of new ag equipment with welding

***Class 72** Level 2 Welding general repair – repair of non-ag equipment with welding.

***Class 73** Level 2 Welding general fabrication –creation of non-ag equipment with welding

***Class 74** Level 2 Welding artistic fabrication –creation of artistic or interpretive pieces with welding

***Class 75** Level 2 Brazing repair

***Class 76** Level 2 Brazing fabrication

***Class 77** Level 2 Smithing –A design forged with at least two different formed elements (twists and spirals for example)

Advanced – Ag Mechanics (about 7 - 9 years of experience)

***Class 80** Level 3 Welding ag repair –repair of ag equipment with welding

***Class 81** Level 3 Welding ag fabrication –creation of new ag equipment with welding

***Class 82** Level 3 Welding general repair –repair of non-ag equipment with welding

***Class 83** Level 3 Welding general fabrication –creation of non-ag equipment with welding

***Class 84** Level 3 Welding artistic fabrication –creation of artistic or interpretive pieces with welding

***Class 85** Level 3 Brazing repair

***Class 86** Level 3 Brazing fabrication

***Class 87** Level 3 Smithing –A design forged with at least three different formed elements (twists, spirals, and bulbs for example)

Master – Ag Mechanics (10 or more years of experience)

***Class 90** Level 4 Welding ag repair –repair of ag equipment with welding

***Class 91** Level 4 Welding ag fabrication –creation of new ag equipment with welding

***Class 92** Level 4 Welding general repair –repair of non-ag equipment with welding

***Class 93** Level 4 Welding general fabrication –creation of non-ag equipment with welding

***Class 94** Level 4 Welding artistic fabrication –creation of artistic or interpretive pieces with welding

***Class 95** Level 4 Brazing repair

***Class 96** Level 3 Brazing fabrication

***Class 97** Level 4 Smithing –A design forged with at least four different formed elements (twists, spirals, and bulbs for example)

4-H STEM - ARCHITECTURAL BLOCK CONSTRUCTION

The STEM - ABC project area is a new for 2021. The project is starting with an emphasis 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 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.

1. 4-H members must be currently enrolled in the Kansas 4-H STEM –Architectural Block Construction project to exhibit in this division.

2. Each exhibitor may enter one exhibit. Exhibits must have been constructed during the current 4-H year.

3. Counties are limited to FOUR exhibits to the state fair to insure sufficient space for all exhibitors.

4. Total exhibit dimensions may not exceed 2 feet high, by 2 feet wide, by 2 feet deep.

5. All exhibits should be placed in a sturdy see through enclosure with a top, bottom, and 4 sides. A fish tank would be an acceptable enclosure. This is to keep exhibit parts from being “scattered to parts unknown” at the fair. The outer dimensions of the enclosure are part of the total exhibit dimensions.

6. All components used in construction should be dust free, clean, free of chips, scuffs, or cracks.

- 7.** The primary building component should be interlocking blocks, commonly referred to by the brand name of Lego®
- 8.** Other architectural components can be integrated into dioramas to illustrate architectural aspects that may be difficult to convey with traditional interlocking blocks.
- 9.** The use of existing “store bought” sets for major architectural 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 architectural component of the set it came from.
- 10.** Displays must have significant architectural components (walls, windows, doors, roofs, canopies, flying buttresses, etc.), landscapes are discouraged.
- 11.** Architectural elements should have a consistent look, walls with no pattern or consistency will be deducted one ribbon placing.
- 12.** Gaps or cracks should not be visible between assembled blocks.
- 13.** Doors should open and close, windows can be either fixed or open and close.
- 14.** Vehicles that are intended to stay in a single place should be affixed to base plates with sticky tack, hot glue, or other method.
- 15.** Reveals that show the inside of a structure are acceptable, such as only having three walls to allow an unobstructed view into a room.
- 16.** Mechanical enhancements or motion elements that add motion to the diorama are acceptable and encouraged. If used judges should be able to use them and instructions should be provided for operation.
- 17.** Artistic designs with no architectural design/components are not permitted and two ribbon placings will be deducted.
- 18.** The exhibitor’s name(s) and county or district must be tagged or labeled in a prominent location on the display.
- 19.** Each exhibit must include an Architectural Block Construction information packet. Entry of just a packet without an accompanying exhibit is not a sufficient exhibit.
- 20.** Each exhibitor is required to complete the “4-H STEM - Architectural Block Construction Exhibit Information Form” which is available through your local K-State Research and Extension office or at www.STEM4KS.com . This form must be attached to the outside of a 10” x 13” manila envelope. Do not tie the envelope to the exhibit.
- 21.** Each exhibit information packet should include the following items:
 - a. At least one drawing of the desired architecture on graph paper, multiple views (top, front, side) are preferred;
 - b. 1 to 5 pages of photos showing work on the exhibit, preferably from a beginning state to final or completed state;
 - c. If appropriate operating instructions for mechanical portions of the diorama
- 22.** Additionally, exhibitors are required to create a video about their project discussing their construction experiences and the architectural elements of the diorama. This allows judges to get a better understanding of the exhibit and allows youth the opportunity to fully explain their exhibit. The video should be no longer than 8 minutes and should be placed on a USB drive. These videos may also be considered for inclusion in a running video loop in the 4-H STEM area at the fair after review by judges, superintendent(s), and extension staff. Adult guardians must complete the video release included with the exhibit form. If the release is not

completed the video will not be included in the video loop on display in the 4-H STEM area at the Fair.

**Introductory Architectural Block Construction
(1 -3 years of experience)**

Must meet Kansas State Fair age requirements to advance.

***Class 100** Diorama illustrating at least 2 architectural features beyond floors, ceilings, and walls

**Experienced –Architectural Block Construction
(4 -6 years of experience)**

***Class 101** Diorama illustrating at least 4 architectural features beyond floors, ceilings, and walls, and includes 1 or more motion elements

**Advanced – Architectural Block Construction
(7 -9 years of experience)**

***Class 102** Diorama illustrating at least 6 architectural features beyond floors, ceilings, and walls, and includes 2 or more motion elements

**Master –Architectural Block Construction
(10 or more years of experience)**

***Class 103** Diorama illustrating at least 8 architectural features beyond floors, ceilings, and walls, and includes 3 or more motion elements

DIVISION S – VISUAL ARTS

SUPERINTENDENTS: Jennifer Grabbe and Roxie Zimmerman

ASSISSTANT SUPERINTENDENTS: Vance Hockersmith, Rayna LaFond

1. Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the Fair to visit with a judge on Monday, July 12. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

2. Each 4-H'er may exhibit up to 3 articles in each class. However, each article must demonstrate a different skill. Each 4-H'er is limited to a total of 6 exhibits.

3. A set of items is considered a single entry. Mark items accordingly.

4. Attach a completed entry tag to the exhibit with string and safety pin or masking tape.

5. Paintings and drawings must be matted and/or framed and ready to hang. Items, which need to be hung, must have a wire or saw tooth hanger in order to be properly displayed. Other items should be prepared for appropriate display. Items not prepared properly will not be allowed to exhibit.

6. Ellis County will be allowed to exhibit one item in each of five categories, across all eligible ages, at the Kansas State Fair. The judges will select these exhibits.

7. Quilts (except those sewn into a garment – Clothing project); knitting, crocheting, weaving, spinning, rug making, needle arts and macramé should be enrolled &

entered in the Fiber Arts project.

8. Articles exhibited must be an original design created by the exhibitor.

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

10. All visual arts exhibits are evaluated using a visual arts rubric, which considers correct use of design elements, craftsmanship, and creativity.

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

Junior 4-H Visual Arts (ages 7 – 13 years)

***Class 1** Fine Arts - Oil, chalk, charcoal, dyes, pastels, pencil, ink, acrylic, or watercolor on canvas, canvas board, paper, wood, metal, or textiles, framed as a picture, prepared for hanging. Stretched canvas art on a wooden frame is considered prepared for hanging provided that frame has a hanger.

***Class 2** Clay and Ceramics - Any original item made of clay; may be fired or unfired, hand formed, or thrown on a wheel. Self-hardening, fire/oven-cured, and/or cornstarch clays are acceptable. Items can include, but are not limited to, clay statues, bowls, etc.

***Class 3** Leather and Jewelry - Any leather stamping, carving, tooling, lacing, or stitching piece or any jewelry piece made from any medium are acceptable exhibits.

***Class 4** Three-Dimensional - The piece must be observable on at least three sides and should be either free-standing or prepared to be hung. Craft and pre-formed or assembled projects are not acceptable.

***Class 5** General Crafts - This category incorporates miscellaneous pieces that do not correspond to the four, above-mentioned categories.

Senior 4-H Visual Arts (ages 14 – 18 years)

***Class 1** Fine Arts - Oil, chalk, charcoal, dyes, pastels, pencil, ink, acrylic, or watercolor on canvas, canvas board, paper, wood, metal, or textiles, framed as a picture, prepared for hanging. Stretched canvas art on a wooden frame is considered prepared for hanging provided that frame has a hanger.

***Class 2** Clay and Ceramics - Any original item made of clay; may be fired or unfired, hand formed, or thrown on a wheel. Self-hardening, fire/oven-cured, and/or cornstarch clays are acceptable. Items can include, but are not limited to, clay statues, bowls, etc.

***Class 3** Leather and Jewelry - Any leather stamping, carving, tooling, lacing, or stitching piece or any jewelry piece made from any medium are acceptable exhibits.

***Class 4** Three-Dimensional - The piece must be observable on at least three sides and should be either free-standing or prepared to be hung. Craft and pre-formed or assembled projects are not acceptable.

***Class 5** General Crafts - This category incorporates miscellaneous pieces that do

not correspond to the four, above-mentioned categories.

DIVISION R - WILDLIFE

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

SPECIAL RULES

1. Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

2. Type of exhibit in this division is open to notebooks, posters, picture story, display boards, etc. Maximum exhibit size is 2' x 3'. (Notebooks may be a journal showing habitat development, bird watching tips, information on endangered species or any in-depth study in the wildlife area. The display might include different flies the exhibitor has, or different fish found in the exhibitor's county, etc.) See scorecard in the Notebook/Poster /Display division.

3. Name, county, age and year in project should be in a prominent location on the exhibit.

4. Care should be taken to select durable materials that will withstand county fair conditions.

*Class 1 Notebook - contents pertain to some phase, results, story or information about the wildlife project.

*Class 2 Promotional Poster - must be related to something learned in the wildlife project. Posters are not to be larger than 22" X 28".

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

*Class 4 Taxidermy/Tanning Exhibit. Should include an attachment that shows the work in progress through photos with captions, or a detailed journaling of the process.

DIVISION T - WOODWORKING

SUPERINTENDENTS: Christina Conner, Brandi LaFond

ASSISTANT SUPERINTENDENTS: Joshua Conner, James & Zechariah Dickman, Caleb LaFond, Lizzy Vajnar

Register your entries into the faireentry.com system by the Fair entry deadline. Check in items on Monday, July 12, 3 – 7 p.m. Schedule a time before the Fair to visit with a judge on Tuesday, July 13. If a 4-H'er cannot attend judging, attach a note card explaining how the article was planned and made.

Exhibits will release from 9:00 – 10 a.m. on Sunday, July 18.

SPECIAL RULES

1. Each exhibit entered must be accompanied with a cost of materials, a bill of materials and a plan from which it was constructed. Plan must be complete and accurate, either by scale drawing or fully dimensioned, to the extent that a duplicate

item could be built using the plans as a guide. If you draw your own plans, a scale of 1/4 inch = 1 foot is suggested. Projects with missing or insufficient plans will be lowered one ribbon placing. **Please note:** a set of step by step instructions is not a plan.

2. Refinished/repaired furniture should be exhibited in the Home Environment Project in order to qualify for State Fair.

3. Projects made from pre-cut kits are not allowed for State Fair consideration.

4. 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.

5. The use of materials other than wood should be kept to a minimum.

6. Firearms and weapons are not to be entered or displayed.

7. Projects that have unsecured glass, i.e. glass shelves, glass top of a coffee table, etc. should not be brought to the fair. Glass that is secured in the project, i.e., glass front of a gun cabinet, etc., is permissible since it cannot be easily removed.

Junior Division

***Class 1** Woodworking article for farm or shop use.

***Class 2** Lawn furniture.

***Class 3** Household furniture.

***Class 4** Other woodworking articles not included in the above classes.

Class 5 Repaired or refinished furniture (this class is open to those who

have met the requirements of either woodwork or home improvement projects.) A picture of the furniture before refinishing and a description of the process used to refinish the piece should accompany this exhibit.

Class 6 Woodworking items made from a kit.

Senior Division

***Class 7** Woodworking article for farm or shop use.

***Class 8** Lawn furniture.

***Class 9** Household furniture.

***Class 10** Other woodworking articles not included in the above classes.

Class 11 Repaired or refinished furniture (this class is open to those who have met the requirements of either woodwork or home improvement projects.) A picture of the furniture before refinishing and a description of the process used to refinish the piece should accompany this exhibit.

Class 12 Woodworking items made from a kit.

4-H LIVESTOCK

LIVESTOCK SANITARY REQUIREMENTS

Animals with active cases of ringworm, warts, lice, mange or club lamb fungus may not be shown. Animals may be sent home at the discretion of a veterinarian. Superintendent and assistant superintendents will use their discretion until a veterinarian is available.

Medications for all market animals can only be administered by a licensed veterinarian. Failure to do so could result in the owner being asked to take the animal home. No tranquilizers are allowed. Straw may not be used for bedding in

the beef barn or swine pens.

LIVESTOCK RULES

1. All market animals, including beef, sheep, swine and meat goats, will be weighed in between 6:00 and 8:00 p.m. on Monday, July 12th. The weight recorded of the animal at the designated weigh-in time will be the official weight. Animals will not be re-weighed.

2. No market animals are allowed to have testicles. Violators will be disqualified.

3. All market animals and bucket calves must have an official 4-H ear tag.

4. Commercial heifers must be tagged with an official 4-H tag and a photo ID of the animal with the tag must be submitted to the Extension Office by 5:00 p.m. the day of the Sheep & Swine weigh-in. **Registered animals must have their papers in the name of the 4-H member by May 1.** These certificates will be checked by the Superintendents at time of entry on the fairgrounds.

5. Each exhibitor will be responsible for caring for his/her own animals. Exhibitors must furnish feed, watering buckets and tack.

6. No bedding allowed in swine pens. Rubber mats are acceptable bedding. The sheep and goats will be allowed bedding, but the pens will be dry. No water can be used to hose down sheep or goat pens.

7. Exhibitors are responsible for keeping stalls and alleyways clean at all times. Provisions will be made for disposing of litter and trash.

8. Exhibitors must clean up their stalls and tie out areas before leaving the fair. If the stalls, pens and walkways and tie out areas are not cleaned daily to the satisfaction of the superintendent, deposits will be forfeited. Deposits are: \$5 a pen for small livestock, including bucket calves and \$5 per entry for small animal barn entries. Exhibitors should all work together to keep the areas clean. Tie out areas will be assigned by club. Forfeited deposits will be used to support improvements in the respective barn.

9. **Animal Welfare Policy** - All animals and livestock shown, housed, or displayed shall receive care that is consistent with accepted animal care practices, and the rules and regulations set by the Ellis Co. 4-H Council. Animals experiencing illness, injury, or discomfort should be properly treated. It is the responsibility of the 4-H member to provide or make arrangements with others to feed, water and care for the wellbeing of their project animals while on the Ellis Co. Fairgrounds. Failing to do so will result in the member being asked to remove their animals from the fairgrounds. They will forfeit premiums and the right to sell their animals in the premium sale during the current fair. The Superintendent, Extension Agents, and a Fairboard Representative will serve as the review committee.

10. Printed materials advertising any animal sales prohibited on the grounds.

11. Any early release of exhibits without pre-approval will result in forfeiture of all Fair ribbon premiums. Submit request, including reason for early release, in writing to the Extension Office prior to the Fairground clean up night. The 4-H Ag Livestock committee will consider requests at their meeting on the Wednesday prior to Fair entry day.

12. Exhibitor must show his/her own livestock without assistance. In the event an exhibitor has more than one animal in an individual class, only another Ellis County 4-H'er may show the other animal. In Showmanship, exhibitors must show their

own animals. Only animals entered in the 4-H show are eligible for showmanship. Medical emergencies and conflicts with other Ellis Co. Fair events will be considered by Ag Livestock Committee on a case by case basis. Contact the Extension Agents to arrange an Ag Livestock review of the situation prior to the livestock show.

13. Animals shown in the market classes are not eligible to show in breeding classes and vice versa.

14. GROOMING: Each exhibitor must groom his/her own animals and may use only the assistance of any livestock exhibitor's immediate family (mother, father, legal guardian, brother or sister) or another 4-H member who is a livestock exhibitor at the Ellis County Fair. Anyone wishing to report unauthorized people grooming animals must make a written complaint to the superintendent. The 4-H Fair Grievance Committee will investigate and, if necessary, take action. After the first warning, any market animals disqualified by the committee will not be allowed to show or sell.

15. Adults or other 4-H members are not to interfere with the judging in any way. Violation may disqualify the exhibitor.

16. Any exhibitor who is found to have tampered with or who inhumanely abuses an animal or enters an exhibit that is not eligible or does not abide by fair rules will be barred from showing and must forfeit any premium, ribbon or prize won.

17. The judge's decisions are final.

18. Members of the 4-H Ag Livestock committee proposed & 4-H Council approved the following decision-making process involving 4-H Ag Livestock project areas. Ag Livestock committee members make the following decisions: proposing rules for 4-H Ag Livestock events and scheduling activities. Their decision-making involvement ends at the beginning of the Ellis Co. Fair. Livestock Superintendents make the following decisions: Weigh-in / tag verification, enforcing fair book rules. Fairboard members make the following 4-H Ag Livestock decisions: Facility / structural needs, safety issues. Extension Agents make the following decisions: Supporting Superintendent decisions, collecting livestock event fees, enforcing deadlines. A 4-H Fair Grievance Committee functions to review issues of concern to participants during the Ellis Co. Fair. See specific information on grievance procedures in general 4-H rules.

19. To qualify for the State Fair, a 4-H'er must exhibit at the Ellis County Fair. However, 4-H'ers are not required to exhibit the same animal at the State Fair as was exhibited at the County Fair. Another animal may be shown as long as it was part of the same 4-H project. Animals to be shown at the State Fair must be nominated. The nominated animal must have the official Kansas eartag, a DNA hair sample for steers, market lambs and goats, scrapie tags for lambs and goats, an ear notch card for market hogs, and have paid a small fee. All nominations are due in Manhattan by the following dates: market steers & market heifers - **May 1**; market lambs, market hogs and market goats - **June 15**.

20. 4-H'ers owning livestock will be held responsible until the release time.

21. An entry shown in the poultry / rabbit barn can't be checked out and shown in the pet show.

22. All market animals have to be present at the county weigh-ins in order to be shown at the county fair. At the respective weigh-in, the animal may be put in the

4-H family's name. At the pre-entry deadline in July, each animal must be designated to one 4-H member's name.

23. Tri-State Royal selection procedure. The Grand Champion Senior Showman in each specie, beef, meat goats, sheep & swine will represent Ellis Co. at the Tri-State Royal show. If the event the Senior Champion is unable to participate; the Reserve Champion Senior will be asked. Intermediate Champion, Intermediate Reserve Champion, Junior Champion and Reserve Junior Champion will follow in line until a representative is available to represent Ellis Co. If no champion is available, no one will represent Ellis County. Only Champion & Reserve Champion Market Animals will represent Ellis County in the Market livestock classes.

25. All extension cords must be 12-3 cords and show no signs of fraying or tape repair. Fairboard reserves the right to remove any potentially dangerous cords from use.

HERDSMANSHIP AWARD

Clubs will be judged Wednesday, Thursday, Friday and Saturday of the Fair. All species of animals will be included in judging for this award. Clubs will be competing for a traveling award in each specie (Beef, Sheep, Swine, Rabbit, and Poultry). Total possible points for each club in each barn will be 100 points per day. The awards will be given prior to the livestock sale to the club that has the highest total score from all three days of judging in each barn area.

The awards will be announced prior to the livestock sale to the club that has the highest total score from all three days of judging in each barn area. **Special awards will include the winning club in each specie receiving a \$50 cash award sponsored by Commerce Bank and getting to select their stall space for next year's fair.**

Herdsmanship Scorecard is as follows:

- I. Cleanliness of Alleys & Stalls/Pens 40 points**
 - a. Bedding adequate, dry, clean and in place
 - b. Manure hauled out and deposited in designated areas.
 - c. Alleys swept clean and are free of dust and shavings.
 - d. Feed pans in front of animals only at feeding time.
 - e. Outside areas kept clean.
- II. Arrangement of Exhibits..... 15 points**
 - a. Exhibits lined up in an attractive manner.
 - b. Show boxes and equipment stored as neatly as possible.
 - c. Hay neat and orderly (if applicable).
 - d. Feed pans and tack kept in designated areas.
- III. Appearance of Animals 25 points**
 - a. Animals cleaned and brushed.
 - b. Animals securely tied or penned.
- IV. Stall Cards & Educational Exhibits20 points**
 - a. Readable from alley.
 - b. Neatly arranged.
 - c. Clean and complete.
 - d. Any additional information regarding your animals or the species.
- TOTAL 100 points**

RATE OF GAIN CONTEST

There will be a rate of gain contest for market beef and swine. It will be based on the beginning weight (County weigh-in) minus the final weight (County Fair weigh-in) divided by the number of days on feed, i.e. average daily gain, ADG. A rosette will be awarded to the champion ADG in beef, sheep, goats and swine.

LIVESTOCK RELEASE

It will be the responsibility of the 4-H family to remove livestock from the fairgrounds during release/clean up, Sunday morning (8 – 10 a.m.).

4-H LIVESTOCK SALE RULES

1. The sale will begin at 6:00 p.m. on Saturday, July 17, 2021.
2. In order to sell an animal, it must be exhibited and shown at the Ellis County Fair in its designated class and 4-H member must have attended the mandatory sale information meeting.
3. Members can sell a total of two animals in the livestock sale. Intent to sell forms and a W-9 must be filled out and signed by the 4-H'er in order to sell. The forms are due at weigh in on Monday, July 12.
4. The order of the sale will be as follows: Food (Gr./Res.), Meat Pen Rabbit (Gr./Res.), Meat Pen Poultry (Gr./Res.), Market Steer (Gr./Res.), Market Heifer (Gr./Res.), Feeder Calf (Gr./Res.), Sheep (Gr./Res.), Meat Goat (Gr./Res.), Swine (Gr./Res), Market Steers, Market Heifers, Feeder Calf, Meat Pen Rabbits, Swine, Sheep, Meat Pen Poultry, and Meat Goats. (Blue, Red, White from heaviest to lightest weight classes in each ribbon placing.)
5. The official show weight will be the official selling weight.
6. No animals may be withdrawn from the sale once the sale begins. Animals sold through the sale are ineligible for other 4-H competition, with the exception of the Tri-State Show of Champions or the Ellis Junior Free Fair, provided arrangements are made with the buyer, and it is noted on the "Intent to Sell" form.
7. It will be the responsibility of the 4-H family to remove livestock from the fairgrounds during release/clean up on Sunday morning. The 4-H family will make arrangements and deliver to the locker according to the buyers wishes.
8. A hand written, thank-you note will be submitted to the Extension Office in a stamped and addressed envelope within 45 days of the sale. If a thank you note is not submitted within 45 days, 4-Her will not be allowed to participate in the next year's sale.

DIVISION U - BEEF

SUPERINTENDENT: Billy Legleiter

ASSISTANT SUPERINTENDENTS: Quentin Rupp, Amanda Shannon

All Beef animals will check / weigh in from 6-8 p.m. on Monday, July 12.
Livestock will release from 8:00 – 10:00 a.m. Sunday, July 18.

BUCKET CALF PROJECT
SUPERINTENDENT: Amanda Shannon

- A.** Bucket calves must be tagged with an official 4-H tag and a photo ID of the animal with the tag must be submitted to the Extension Office by 5:00 p.m. the day of the Sheep & Swine weigh-in. Bucket calf is designed for younger 4-H members between the age of 7 and 13. Members shall not have passed their 13th birthday by January 1 of the current year.
- B.** Calves are to be orphaned or weaned, male or female, dairy or beef type. They should have been fed by bottle or bucket. Nurse cow or goat use is prohibited.
- C.** Calves should be born between January 1 and May 1 of current year.
- D.** Dairy or beef quality of calf will not be considered, because purchase is not made on that basis.
- E.** 4-H'ers are limited to one entry in this class. Calves entered in this class may not be shown in any other fair class. Champion bucket calf will not advance to Jr. Champion Fitting & Showing. Bucket calves will not be sold at the 4-H Livestock Sale.
- F.** The bucket calf show will be a "no fit" show. This is defined as not using adhesives, glue, paint or powder products in preparing the animal for the showing. Mousses and oils are allowable.
- G.** Judging is based upon the following:
- a. 25% General Appearance: health, cleanliness, grooming.
 - b. 25% Halter broke and ease at which youth can lead, control and set up the animal.
 - c. 50% Conference judging: What the 4-H'er has learned about caring for and raising the calf. The judge will ask questions about how the calf has been taken care of, training, etc.
 - d. Dairy youth will not be required to walk facing calf.

BUCKET CALVES

Class 1 First year members. Clipping is optional. Scotch combs and show sticks will be optional.

Class 2 Second year members or up to 11-year-old 4-H'ers. Clipping is allowed. Show stick and scotch comb are optional but can be considered by the judges.

Class 3 Third year members or up to 13-year-old 4-H'ers. Clipping is allowed.

BEEF FITTING AND SHOWING

Class 4 Senior Division, age 14 and older

Class 4a Intermediate Division, ages 11 - 13

Class 5 Junior Division, ages 7 - 10

FEEDER CALF PROJECT

A. Any age 4-H'er can select this project.

B. Feeder calves must be owned and tagged by the exhibitor prior to Spring county weigh-in. Purchase official ear tags from the Extension Office. This animal may be a Bucket Calf project from last year with an official tag already in its ear. It will need to be weighed in at the Spring Livestock weigh-in.

C. The animal can be a steer or a heifer. They can be any beef breed or crossed with

dairy, but no purebred dairy is allowed. If you are enrolled in the heifer breeding project, that heifer cannot show in this class.

D. Animals exceeding 925 lbs. at County Fair weigh-in will be shown as market beef animals, rather than as feeder calves.

E. Feeder calves can go through the premium auction and will be sold last after the market steers. 4-H'ers will receive premium price only. They will be responsible for dispersal of their own animal.

F. Feeder calves will be shown in the regular beef showmanship classes, either Junior or Senior, depending on 4-H'ers age.

G. The feeder calf show will be a "no fit" show. This is defined as not using adhesives, glue, and paint or powder products in preparing the animal for the show ring. Mousses and oils are allowable.

Class 6 Feeder Calf

BREEDING HEIFERS

There will only be two classes for heifers; purebred and commercial. Commercial heifers must be tagged with an official 4-H tag and a photo ID of the animal with the tag in the ear, must be submitted to the Extension Office by 5:00 p.m. the day of the Small Livestock weigh-in. **Registered heifers must have their papers in the name of the 4-H member by May 1.** These certificates will be checked by the Beef Superintendent at time of entry on the fairgrounds. All heifers will be shown by age according to classes listed. Registered heifers will also show by breed if there are three (3) or more animals in that breed. All others will show in an "All Other Breeds" (AOB) class.

The breeding beef show will be a "no fit" show. This is defined as not using adhesives, glue, paint or powder products in preparing the animal for the show ring. Mousses and oils are allowable.

1. All heifers born on or after September 1st 2019 will be eligible to show.
2. Heifers will show by breed if 3 or more of the same breed are represented.
3. National breed guidelines will determine classification of heifers.
4. Heifers of a breed will all be shown in one class unless there are 6 or more then they will be broken down into classes according to age.
5. If there are less than 3 heifers of a breed they will show in the All Other Breeds class.
6. Unregistered heifers will be shown as commercial.
7. Age breakdowns will be:
 - a. Junior heifer calves born after January 1st of 2021.
 - b. Senior heifer calves born between September 1st and December 31st 2020
 - c. Summer yearling heifers born between May 1st and August 31st 2020
 - d. Junior yearling heifers born between January 1st and April 30th 2020
 - e. Senior yearling heifers born between September 1st and December 31st 2019
8. A Supreme Champion and Reserve Supreme Champion will be selected after all breed champions, AOB champion and commercial champion are selected.

9. Prizes will be awarded to Supreme Champion and Reserve Supreme Champion heifers and cash will be presented to all breed and reserve breed champions.
10. Prizes will be awarded AFTER a Thank You note is signed to the sponsors of the award. (Thank You notes will be provided)
11. Any disputes will be handled by the Ellis County Fair 4-H Grievance Committee and their ruling will be final.

REGISTERED HEIFERS

***Class 7** Registered Heifers

COMMERCIAL HEIFERS

***Class 8** Commercial Heifers

The Top 5 overall heifers will be recognized. No premium is awarded for this honor.

MARKET BEEF PROJECTS

1. To be eligible to compete in the market beef division, a 4-H'er must be enrolled in the beef project and must have had his/her animal at county weigh-in.
2. Market Heifers/Steers can be shown regardless of weight at check in but must weigh 925 pounds to be eligible to sell at sale.
3. Market Heifers shown in market classes cannot be shown in breeding classes and Breeding Heifers shown in breeding classes cannot be shown in market classes.
4. Purebred steer/heifer classes will be conducted, if there is a minimum of 5 entries. If the minimum number is not reached, steers/heifers will show in crossbred classes.
5. The market beef show will be a "no fit" show. This is defined as not using adhesives, glue, and paint or powder products in preparing the animal for the show ring. Mousses and oils are allowable.
6. Top exhibit in each class will return to the ring for consideration in selecting a Champion and Reserve Champion Market Beef animal.
7. **NEW in 2021** – Carcass Ultrasound Evaluation – Market beef must be born after January 1 of the previous year to be entered in this class. Animals will be ultrasounded as they check in at weigh-in at the beginning of the Fair.
This class will be held if the KSRE Beef Specialist has permission to conduct the activity. Check for more information in the County Fair 4-H Livestock entry packet mailed out in June.

If there are 5 steers/heifers of one breed, they may show in a breed class.

***Class 9** Purebred and crossbred market steers.

***Class 10** Purebred and crossbred market heifers

Class 10a Carcass Ultrasound Evaluation

Top exhibit in each class will return to the ring for consideration in selecting a Champion and Reserve Champion Market Beef. The Top 5 overall market beef animals will be recognized. No premium is awarded for this honor.

DAIRY SPECIAL RULES

1. Read General Rules and Livestock Sanitary Requirements.
2. Dairy animals will check / weigh in during the livestock weigh-in from 6-8 p.m. on Monday, July 12. Livestock will release from 8:00 – 10:00 a.m. Sunday, July 18.
3. Exhibitors may enter a maximum of five (5) animals in this department, with no more than three (3) animals in each class.
4. There will only be two classes for heifers; registered and grade. All grade or leased animals must file official “4-H Grade Dairy Cattle or Leasing Identification Form” with the Extension Office by June 15 to be eligible to show. **Registered heifers must have their papers in the name of the 4-H member by May 1.** These certificates will be checked by the Beef Superintendent at time of entry on the fairgrounds. All heifers will be shown by age according to classes listed. Registered heifers will also show by breed regardless of numbers.
5. A Champion and Reserve Champion Showman may be selected in Jr. and Sr. divisions.
6. Showmanship age is as of January 1 of the current year. All exhibitors are encouraged to compete in showmanship class and pre-registration by July 9 is requested.
7. The 4-H Dairy show will be a “no fit” show. This is defined as not using adhesives, glue, and paint or powder products in preparing the animal for the show ring. Mousses and oils are allowable.
8. The Top 5 overall dairy animals will be recognized. No premium is awarded for this honor.

Fitting & Showing

- Class 11** Fitting & Showing, Senior Division, Age 14 and older
Class 12 Fitting & Showing, Intermediate Division, Ages 11 - 13
Class 13 Fitting & Showing, Junior Division, Ages 7 - 10

Classes

- Class 14** Heifer calf: (born after August 31, previous year)
Class 15 Yearling heifer: (born Sept. 1 to Aug. 31, and 10-22 months old)

DIVISION W - GOATS SUPERINTENDENT: Jeff Neher

DAIRY GOATS SPECIAL RULES

1. Read general regulations.
2. To be eligible to compete in the dairy goat division, a 4-H'er must be enrolled in the Dairy Goat project. **Registered dairy goats must have their papers in the name of the 4-H member by May 1.** These certificates will be checked by the Goat Superintendent at time of entry on the fairgrounds. Commercial goats must be tagged by the exhibitor by the day of the county weigh-in. Purchase official ear tags from the Extension Office and tag animal prior to the county weigh-in. A tattoo (registered) or an official USDA premise ID tag (scrapie tag - commercial) must be in the animal's ear at spring weigh-in. Submit a photo id of the length of the

animal, with its head turned to show 4-H tag # to the Extension Office by 5 p.m. the day of the spring county weigh-in.

2. Superintendent is authorized to refuse animals showing any signs of disease or otherwise dangerous to the other animals being shown.

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

4. Only does are allowed to show.

5. Animals will check / weigh in from 6-8 p.m. on Monday, July 12. Livestock will release from 8:00 – 10:00 a.m. Sunday, July 18. Lactating animals will be released after the show on Wednesday.

Fitting & Showing

Class 1 Fitting & Showing, Senior Division, Age 14 and older

Class 1a Fitting & Showing, Intermediate Division, Ages 11 - 13

Class 2 Fitting & Showing, Junior Division, Ages 7 - 10

Scorecard:

Appearance of Animals..... 40%

Appearance of Exhibitor..... 10%

Showmanship of Animal..... 50%

BREED DIVISIONS:

Purebred – all breeds shown together unless there are 5 of one breed in a class.

JUNIOR DOE DIVISION

(Never Freshened)

Class 3 Junior doe - birth through 4 months

Class 4 Junior doe - 5 months through 12 months

Class 5 Junior doe - 13 months to 24 months

SENIOR DOE DIVISION

Class 6 Senior doe - Under 2 years - in milk

Class 7 Senior doe - 2 years through 4 years

Class 8 Senior doe - 4 years and older

Class 9 Get-of-Sire (to consist of 3 does, one in milk, the get of 1 sire, the sire must be named)

Class 10 Mother and Daughter

MEAT GOATS

1. Meat goats are goats bred for meat purposes.

2. To be eligible to compete in the market goat division, a 4-H'er must be enrolled in the Meat Goat project and goats must be owned and tagged by the exhibitor by the day of the county weigh-in. Purchase official ear tags from the Extension Office and tag animal prior to the county weigh-in. **An official USDA premise ID tag (scrapie tag) must be in the animal's ear at Spring Weigh-in AND remain in the ear for the County Fair weigh-in.**

3. Meat goats will check / weigh in from 6-8 p.m. on Monday, July 12. Livestock will release from 8:00 – 10:00 a.m. Sunday, July 18.

4. Market goats may show regardless of weight but must weigh at least 50 lbs. to be

eligible to sell.

5. All market goats must be “slick shorn” above the knee and hock.

6. All goats showing at the fair must be checked for health or skin problems. If found, the animal will be excused from the fairgrounds.

7. Wethers or does may be shown in market meat goat classes. Does cannot show in both the Market Goat and Commercial Doe classes.

8. Market Goats must have milk teeth in place at the time of the fair weigh-in. Market goats must be less than 1 year of age.

9. Market Goats must be dehorned or if horned, the horns must be tipped and rounded.

10. Meat goats shown in meat classes cannot be shown in dairy classes and dairy goats shown in dairy classes cannot be shown in the meat classes.

11. Market classes will be divided by weight.

12. Exhibitors may use a collar, a collar with a short lead, or a halter when showing. Medium/3mm or smaller pinch collars will be allowed. Bracing is allowed but during the judge's inspection or handling, all four feet are required to be in contact with the ground.

13. Goats must be identified with a registered tattoo or an official USDA premises ID tag (Scrapie tag.) Goats identified with registration tattoos must have legible tattoos and must have registration papers for these animals available for inspection. Obtain Scrapie tag from the animal's breeder. If the youth is feeding a home raised goat, the responsibility of obtaining the Scrapie tag rests with the youth or the youth's family.

14. All breeding does must weigh a minimum of 50 pounds. All breeds and crossbreeds are combined. Does will be broken into classes by weight with lightest weight animals showing first. Does may be older than 1 year old. Does in this class may be slick shorn or fitted.

15. The Top 5 overall market goats / breeding goats will be recognized. No premium is awarded for this honor.

Class 11 Fitting & Showing, Senior division, Age 14 and older

Class 11a Intermediate Division, age 11 - 13

Class 12 Junior Division, Age 7 - 10

***Class 13** Market goats, purebred or cross (wethers or does)

Class 14 Commercial/Breeding does

DIVISION X – 4-H HORSE

SUPERINTENDENT: Becky Pokorny

ASSISTANT SUPERINTENDENT: Wade Schmidtberger

1. The 4-H Horse show will be starting at 8:30 am. on Sunday, July 11, 2020. **Pre-registration required on Fair entry system.** Check-in from 7:30 to 8:00 a.m. 4-H pictures from 8:00 to 8:30 a.m.
2. Read General Rules and **NEW** “Kansas 4-H Horse Show Rule Book”. Rules for all horse classes will be taken from this manual.
3. **To exhibit a 4-H horse, a NEW horse identification certificate must be correctly completed and submitted to the Extension Office by May 1.**
4. The age of a horse is determined as of January 1, of the year in which it is born.

5. To exhibit in the Two-Year-Old Snaffle Bit Western Pleasure class, a 4-H member must have properly submitted a horse identification certificate, nomination form and nomination fee to the State 4-H Office **before May 1**. The 4-H member must have also completed the appropriate Horse Achievement Levels.
6. An exhibitor can exhibit in only one of the Western Pleasure classes.
7. Eligibility requirements for the State 4-H Horse Show at the Kansas State Fair have changed. Please contact the Extension Office for a list of those requirements.
8. Ellis County 4-Hers showing will be placed in purple, blue, red or white groups. A Grand and Reserve Halter Horse will be named from the first purple in each halter class. They will receive a special “champion” rosette and champion premiums. All other awards are “special” sponsored cash awards.
9. Judge or superintendent has the right to combine age groups in English classes if not enough exhibitors are entered.
10. The use of protective headgear, in place of a hat, is the optional choice of exhibitors in any and all Western classes, including judged, timed and futurity classes.

Horse Fitting & Showing

Class 1	Age 14 to 18
Class 2	Age 11 to 13
Class 3	Age 7 to 10

Halter – All Breeds (Large Horse)

Class 4	Weanling
Class 5	Yearling
Class 6	2-year-old
Class 7	3-year-old
Class 8	Aged Mare
Class 9	Aged Gelding

POA’s, Shetland, and Miniature Horses

Class 10	Weanling
Class 11	Yearling
Class 12	2-year-old
Class 13	Senior Mare
Class 14	Senior Gelding

Grand and Reserve Champion Halter Horse

English Classes

Hunter Under Saddle

Class 15	Age 14 to 18
Class 16	Age 11 to 13
Class 17	Age 7 to 10

Huntseat Equitation

Class 18	Age 14 to 18
Class 19	Age 11 to 13
Class 20	Age 7 to 10

Western Pleasure

Class 23	Age 14 to 18
Class 24	Age 11 to 13
Class 25	Age 7 to 10
Class 26	Walk Trot Pleasure 7 to 10 (rider cannot participate in any other class involving a canter or lope)
Class 27	Pony Pleasure (Horse must be 56" & under)
Class 22	Three-Year-Old Horse Futurity Project – for 4-Hers only

Western Horsemanship

Class 28	Age 14 to 18
Class 29	Age 11 to 13
Class 30	Age 7 to 10

Reining

Class 31	Age 14 to 18
Class 32	Age 11 to 13
Class 33	Age 7 to 10

Barrel Racing

Class 34	Age 14 to 18
Class 35	Age 11 to 13
Class 36	Age 7 to 10

Flag Race

Class 37	Age 14 to 18
Class 38	Age 11 to 13
Class 39	Age 7 to 10

Pole Bending

Class 40	Age 14 to 18
Class 41	Age 11 to 13
Class 42	Age 7 to 10

DIVISION Y - SHEEP

SUPERINTENDENT: Jeff Neher

1. To be eligible to compete in the market sheep division, a 4-H'er must be enrolled in the sheep project and must have had his/her animal at county weigh-in.
2. Lambs must be owned and tagged by the exhibitor by the Spring county weigh-in. Ear tags must have been purchased at the Extension Office and animals tagged before weigh-in. An official USDA premise ID tag (scrapie tag) must be in the animal's ear at Spring weigh-in and remain in the ear through the County Fair.
3. Sheep will check / weigh in from 6-8 p.m. on Monday, July 12. Livestock will release from 8:00 – 10:00 a.m. Sunday, July 18.
4. Market lambs may show regardless of weight but must weigh at least 85 lbs. to be eligible to sell. Lambs can be either wethers or ewes.
5. All market lambs must be "slick shorn" with an equal amount of wool above the

- knee and hock (head and belly excluded). Artificial coloring is optional.
6. Exhibitors must be prepared to show registration and transfer papers for animals exhibited in the purebred ewe classes.
 7. All sheep showing at the fair must be checked for sore mouth and club lamb fungus infection. If found, the animal will be excused from the fairgrounds.
 8. Scrapie tags are required for rams and ewes.
 - A. All sheep must be identified with an official USDA premise (Scrapie) tag.
 - B. The original owner of the lamb at birth is responsible to have the lamb tagged with the scrapie tag before it leaves the premises. Refusal by the breeder to tag ewes and rams is punishable by law. If the youth is feeding a home raised lamb, the responsibility rests with the youth or the youth's family.
 - C. Youth may order their own premise tag from the Kansas Animal Health office. This means the person who requested the tag is responsible for maintaining the records.
 - D. To order tags call 785-228-6565. It can take up to 12 weeks to receive the tags.
 9. The Top 5 overall market sheep / breeding sheep will be recognized. No premium is awarded for this honor.

- Class 1** Fitting & Showing, Senior division, Age 14 and older
- Class 2** Fitting & Showing, Intermediate division, Ages 11 - 13
- Class 3** Fitting & Showing, Junior division, Age 7 – 10
- ***Class 4** Market lambs, purebred or cross (wethers or ewes)
- ***Class 5** Purebred ewe, any recognized breed
- Class 6** Grade and crossbred ewe (NOT ELIGIBLE FOR STATE FAIR)
- Class 7** Ewe and lamb (NOT ELIGIBLE FOR STATE FAIR)

DIVISION Z - SWINE

SUPERINTENDENT: Brandon Pfeifer

ASSISTANT SUPERINTENDENT: Konnor Pfeifer

SPECIAL RULES

1. To be eligible to compete in the market swine division, a 4-H'er must be enrolled in the swine project and must have had his/her animal weighed at county weigh-in.
2. Market hogs must be owned and tagged by the exhibitor by the Spring county weigh-in. Purchase official 4-H tags at the Extension Office.
3. All Swine will check / weigh in from 6-8 p.m. on Monday, July 12. Livestock will release from 8:00 – 10:00 a.m. Sunday, July 18.
4. Market hogs may show regardless of weight but must weigh a minimum of 210 pounds to be eligible to sell in the sale.
5. Breeding gilts will not be weighed.
6. Market swine shown in market classes cannot be shown in breeding classes and Breeding gilts shown in breeding classes cannot be shown in market classes.
7. In purebred breeding gilt classes, exhibitor must be prepared to show registration of transfer papers in club member's name s by weigh-in date.
8. The Top 5 overall market swine will be recognized. No premium is awarded for

this honor.

Class 1 Fitting & Showing, Senior Division, age 14 and older

Class 2 Fitting & Showing, Intermediate Division, Ages 11 - 13

Class 3 Fitting & Showing, Junior Division, Ages 7 - 10

Class 4 Market hogs (gilt and barrows, purebred or crossbred). Farrowed after January 1, of current year

Top exhibit in each class will return to the ring for consideration in selecting a Champion and Reserve Champion Market Swine.

Class 5 Purebred breeding gilts farrowed after January 1, of current year

Class 6 Crossbred breeding gilts farrowed after January 1, of current year

Top exhibit in each class will return to the ring for consideration in selecting a Champion and Reserve Champion Breeding Gilt.

DIVISION AA
4-H CHAMPION FITTING & SHOWING
SUPERINTENDENTS: Rhiannon Corn & Codi Fenwick

Contest will be held Friday, July 16, 6:00 p.m. in the show arena.

1. The champion of each division is eligible to show for the overall grand champion.
2. If, for any reason, the champion from any division cannot or does not want to show for grand champion overall, the reserve champion from that division may take his/her place. This will continue in successive order until a representative is identified to show in each specie.
3. The champion's class will include the designated champion from the horse, dairy, meat goat, beef, swine and sheep division, with overall grand and reserve grand picked from these only.
4. Judging will be done on a rotational basis. Each 4-H'er will show all six species of livestock.
5. The judges of the overall championship will not have judged a livestock showmanship class prior to the overall fitting and showing contest.
6. In the event of a tie, the judges will meet to determine the overall winners.

Class 1 Senior Champion Showmanship

Class 2 Intermediate Champion Showmanship

Class 3 Junior Champion Showmanship

DIVISION II - ANIMAL MANAGEMENT SKILL-A-THON
CO-SUPERINTENDENTS: 4-H AG/LIVESTOCK COMMITTEE

1. Contestants will participate in the Skill-a-thon virtually. Watch for sign up details in the 4-H newsletter. 4-H'ers work independently and at their own pace. 4-H'er may ask for assistance from Superintendents only.
2. Any age 4-H'er is welcome to participate. You do not have to be enrolled in an animal/livestock project.
3. Classes will include crops, livestock equipment, meats, animal health, and

livestock identification.

4. An award will be given to the top Jr. & Senior contestant. The top Senior may have the opportunity to represent Ellis County at the KS State Fair Ag Challenge of Champions event during the State Fair. Individual scores may be used in development of a county KS Livestock Sweepstakes team. In order to qualify for a team, you must be 10 & older, 4-H age.

DIVISION CC - LIVESTOCK JUDGING

SUPERINTENDENT: Kelsey Stremel

ASSISTANT SUPERINTENDENT: TBD

1. Time of contest - Friday, July 16 beginning at 9:00 a.m. at the Livestock Show Arena. All Ellis 4-H members are encouraged to participate. A mini clinic is planned for 30 minutes prior to the contest for beginners.
2. 4-H members exhibiting at the Ellis County Fair will be asked at time of entry if their animals may be used for livestock judging class development.
3. Beginner division will be any member who would like to participate for experience only. Beginners may have assistance. No questions or reasons class required. They will not qualify for awards.

Junior Division, 7 - 13 years of age on January 1 of the current year. Juniors will have one questions class and give one set of oral reasons.

Senior Division will be 14 years of age and older as of January 1. Seniors will have up to two reasons classes as determined at the discretion of the official judge and/or committee the day of the contest.

4. No parent assistance will be allowed in Junior & Senior competitive divisions.
5. There will be a minimum of six classes: two beef, sheep & swine classes, with one market and one breeding per specie. If available, a halter horse and / or a meat goat class may be added at the discretion of the committee.
6. While the contest is in session, there shall be no communication among contestants or anyone other than the event coordinators/group leaders. This may result in disqualification from the event. Anyone not assisting with the event will be dismissed from the contest area. Committee members / Group Leaders will assist Junior & Senior members as the need arises.
7. Ellis Co. Livestock Judging scores may be used in conjunction with Animal Management Skill-a-thon scores to select individuals for a county team to participate in the KS Livestock Sweepstakes event. In order to qualify for a team, you must be 10 & older, 4-H age and have participated in at least two contests during the year. If these contests are not Ellis Co. 4-H contests, you should submit an official scoresheet to the Extension Office prior to the County Fair. In the event that no team is found using the above criteria, high points from the County Fair livestock judging contest / Animal Management Skill-a-thon will be used to select a team.

4-H SMALL ANIMAL PROJECTS

DIVISION EE -CATS & SMALL PETS

SUPERINTENDENT: Lakin Eckroat

SMALL PETS

The 4-H Small Pets Show will begin at 1:00 p.m. on Wednesday, July 14. Please check in entries from 12:15 – 12:45. They will be released following the judging.

SPECIAL RULES

1. Aquariums may be decorated with gravel, plants and ornaments if desired. Aquariums may not have more than 2 medium sized fish (or larger) or 4 guppy sized fish. Also, no more than 2 of any other water dwelling creatures in aquarium.
2. Aquarium pets must be exhibited in a small aquarium or glass bowl, not to exceed a capacity of 10 gallons of water and should be aerated. Beta specimen need not be aerated.
3. Hand pets and aquarium pets must be kept in cages or aquariums no larger than a 10 gallon aquarium. Pets must be clean and in good health. Bedding for hand pets and food and water for hand pets and aquarium pets must be provided daily.
4. Due to salmonella risk, turtles will remain in their container for show, and public review.
5. An entry shown in the poultry / rabbit barn can't be checked out and shown in the pet show.

Class 1 Cloverbud pet exhibit

Class 2 Aquarium pets exhibited in 10 gallon or smaller aquarium

Class 3 Terrarium pets exhibited in no more than 10-gallon aquarium with lid

Class 4 Hand pets exhibited in cages or lidded aquariums no larger than the size of a 10 gallon aquarium. (Guinea pigs, hamsters, gerbils, rats and mice).

CATS

SPECIAL RULES

1. The 4-H Cat Show will begin at 3:00 p.m. on Wednesday, July 14. Please check in from 2:15 – 2:45 p.m.
2. Cats & kittens over 2 months of age shown at the Ellis Co. Fair must be current on rabies and distemper vaccinations. Provide proof of vaccination at show check in.
3. 4-H'ers should bring a carpet sample or towel to place their cat on during the show.
4. Cats will be released following the judging.

Class 5 Cloverbud cat exhibit

Class 6 Kitten to one year of age

Class 7 One to five years of age

Class 8 Five years of age and older

DIVISION FF - DOGS

SUPERINTENDENT: Dara Jochum

ASSISTANT SUPERINTENDENT: Devlyn Jochum

The 4-H and Open Class Dog Show will be a combined show and will begin at 2:45p.m. in the Unrein Family Building on Friday, July 9. Please check in your entries from 2:00 – 2:30.

SPECIAL RULES

1. 4-H Dog Show Immunization Record (only MG-34 Revised, October 2017 accepted) must be completed for each dog entered at the 4-H Dog Show. The fully completed form must be presented at health check on the day of the show to be eligible to compete. Teams without the immunization record will not be allowed to show. Required vaccinations include: Distemper, Hepatitis, Parvovirus, Parainfluenza, and Rabies. The rabies vaccination must be administered by a licensed veterinarian. All vaccinations must be current. Dogs must be at least 6 months of age at time of show.
2. Any abuse of dogs on grounds, or in the ring, will result in disqualification.
3. No dog in season will be allowed to show.
4. A well-fitting collar of leather, chain, or fabric is to be used for obedience and Rally Obedience; for Agility, a buckle or snap collar; for Showmanship, a show lead that serves as both collar and lead or a fine link chain collar, a “snake” chain or a fabric slip collar with a narrow, lightweight fabric or leather lead. No spiked, pinch, special training collars, and hanging objects from collars are allowed.
5. Any dog fouling the ring will receive a white ribbon. Owners should collect all dog waste in plastic bags and put in trash.
6. Baiting dogs is not allowed.
7. 4-H’ers must be 9 years of age in order to exhibit at the State Fair Dog Show. In showmanship, 4-H’ers must receive a qualifying blue or purple ribbon in order to exhibit at State Fair. This can be done at any 4-H dog show during the current 4-H year.
8. All guidelines pertaining to ownership, training and showing will be followed according to the extension publication, “Guidelines for Kansas 4-H Dog Shows” January 2021

SHOWMANSHIP CLASSES

Entries will be judged on fitting of the dog: clean and well brushed, tone and condition of coat, healthy appearance, teeth, toenails, and eyes. Handler will be judged on alertness, grace, and ease, coordination with dog and reaction of dog to handler with straight and even gait and movement of dog.

- Class 1** Cloverbud dog exhibit
- Class 2** Beginner Showmanship - ages 7 to 10
- ***Class 3** Junior Showmanship - ages 11 to 13
- ***Class 4** Senior Showmanship - ages 14 to 18

OBEDIENCE CLASSES

Class 5 Pre-Novice (Not eligible for State Fair). All on lead. Heel and figure eight - 40 points. Stand for examination - 30 points. Recall - 30 points. Long sit (1 minute) - 30 points. Long down (3 minutes) - 30 points. Total 160 points

- 5-A** 1 year 4-H'er
- 5-B** 2 year 4-H'er
- 5-C** 3 year 4-H'er

***Class 6** Novice A - Beginner with beginner dogs. Heel on leash and figure eight, stand for examination off leash. Heel off leash free, recall off leash, long sit off leash (1 minute) long down off leash (3 minutes)

***Class 7** Novice B - For person experienced with beginning dog or beginner with experienced dog. Same requirements as Novice A.

***Class 8** Graduate Novice - Persons and dogs who have completed either Novice A or B with qualifying blue or purple ribbon. Heel on leash, heel free and include figure eight, stand for examination, drop on recall, long down (handler out of sight for 5 minutes), long sit (handler out of sight for 3 minutes).

***Class 9** Open A - Person with a dog that has qualified in the Novice and Advanced Novice classes.

Retrieve on flat, broad jump, and figure eight, stand for examination, drop on recall, long down (Handler out of sight for 5 minutes), long sit (handler out of sight for 3 minutes).

***Class 10** Open B - Person with a dog that has qualified in Open A and passed, broad jump, retrieve on flat, retrieve over high jump (1.5 times height at withers), long sit (handler out of sight for 3 minutes), long down (handler out of sight for 5 minutes), figure eight.

***Class 11** Utility - Persons with dogs that have qualified in Open B and passed. Drop on recall, retrieve over high jump (1.5 times height at withers), Article 1, Article 2, long sit (handler out of sight for 3 minutes), long down (handler out of sight for 5 minutes), broad jump.

DIVISION GG - POULTRY

SUPERINTENDENT: Pam Montgomery

ASSISTANT SUPERINTENDENTS: Dean & Sheena Klaus, Luke Montgomery, Colton Pfannenstiel

4-H Poultry and Rabbits will enter the barn Monday, July 12, 7:00 – 8:00 p.m. On clean up night, the previous year's Herdsmanship Award winning club will choose and label their pens. All birds will be pre-entered in the on-line system prior to the Ellis Co. Fair.

Open Class Poultry and Rabbits will enter Monday, July 12 – 8:00 – 8:30 p.m. **All entries will be released Sunday morning, July 18, 8 a.m.** Release and clean-up is a group project. **All exhibitors in 4-H and Open Class are asked to arrive by 8 a.m. to assist with the clean-up process.** Failure to do so will result in forfeiture of stall deposits. 4-H Poultry will be judged at 8:00 a.m. on Tuesday, July 13.

1. Only exhibits checked in at entry time may remain in the barn and shown. Extra birds are to be removed following entry. Each cage requires a stall card and entry tag for identification purposes. Switching entries will result in the forfeit of any placing and ribbons and further action as recommended by Extension Agents.
2. Judging of all classes 2, 3, 4, 5, 12, 13 & 14 will be done primarily on the basis of exhibition qualities as described in "The American Standard of Perfection". Disqualification will bar competition in these classes.
3. Market poultry will be judged on meat qualities only.

4. Only six entries per 4-H member. (Example: Production Pen = 1 entry, Meat Pen = 1 entry, etc.)
5. All bonafide 4-H members must be 9 years old to exhibit at State Fair if they qualify at the county level with a blue ribbon. It is **REQUIRED** that all poultry be banded to insure proper identification at the county fair. **Bands should be in place by JUNE 22.**
6. Poultry shown at County & State Fair must be tested each year and found free of pullorum-typhoid diseases. It is the responsibility of the exhibitor to make arrangements with a certified tester for testing prior to entry.

Proof of test results due at time of entry by one of the following methods.

- Birds are from a certified U.S. Pullorum-Typhoid clean flock as evidenced by either an official VS Form 9-3 or VS Form 9-2 that certifies that all birds over 4 months of age in the flock or on the premises have had a negative test for pullorum-typhoid within the last 12 months.
- For birds under 4 months of age, show proof that the entries were purchased from a U.S. Pullorum-Typhoid clean source and are either the only poultry on the premises or have been physically separated (e.g. housed in separate pens or houses) from untested poultry on the premises.
- Present an official VS Form 9-2 signed by a certified blood testing agent showing that the entries have had a negative pullorum-typhoid test within 90 days prior to the exhibition.
- Entries not qualifying under the previous 3 conditions must have a negative test for pullorum-typhoid at time of entry

7. An entry shown in the poultry / rabbit barn can't be checked out and shown in the pet show.

8. Judging of classes 6, 7, 8,9,10... Will be done on the basis of production qualities only.

***Class 1** Standard Breeds, Large Fowl-One young bird either sex

***Class 2** Standard Breeds, Large Fowl-One old bird either sex

***Class 3** Standard Breeds, Bantams-One young bird either sex

***Class 4** Standard Breeds, Bantams-One old bird either sex

***Class 5** Production Pullets-Pen, 3 standard bred, crossbred, or straincross hens to be judged on egg production qualities only

***Class 6** Production Hens-Pen, 3 standard bred, crossbred, or straincross hens to be judged on egg production qualities only

Class 7 Meat-type Chickens-Pen, 3 standard bred, crossbred, or straincross birds of the same sex to be judged on meat production qualities only

***Class 8** Dual Purpose pullets-Pen, 3 such as Rhode Island Reds, New Hampshire, Plymouth Rocks, etc.

***Class 9** Dual Purpose hens-Pen, 3 such as Rhode Island Reds, New Hampshire, Plymouth Rocks, etc.

Class 10 Tri-Pen, 3 standard bred, crossbred, or straincross birds, one cockerel and two pullets; or 1 rooster and two hens judged on uniformity and breed type (not eligible for State Fair)

***Class 11** Turkeys, all breeds, one bird of either sex

- ***Class 12** Ducks, all breeds, one bird of either sex
- ***Class 13** Geese, all breeds-Pen, one bird of either sex
- Class 14** Guineas, one bird any age either sex
- Class 15** Pigeon, pen of 1, 2 entries allowed
- Class 16** Mixed breeds

POULTRY SHOWMANSHIP

Open to any 4-H'er exhibiting in 4-H poultry classes. In showmanship, you are eligible to show an animal that you have entered in the 4-H division.

During showmanship, only the contestant, judge, and those helping with the show are to be at the table. In the event the Superintendent or Assistant is related to a contestant, another parent will be asked to sit in in their place. Any assistance that is given to the contestant during showmanship will result in forfeit of any ribbon and placing and further action as recommended by Superintendents and Extension Agents.

Class 17 Novice Showmanship - first time in showmanship (no age restriction)

Class 18 Junior Showmanship - ages 7 to 13

Class 19 Senior Showmanship - ages 14 and older

Showmanship scorecard will consist of the following:

1.) Introduction.....	10 points.
2.) Grooming and condition of bird..	20 points.
3.) Routine in any order should be smooth	
A. Examination of head, waddle, etc.	5 points.
B. Wings, color pattern, condition of feathers, check for lice or mite damage	5 points.
C. Show width of back, undercolor....	5 points.
D. Check knell bone, breast feather color, undercolor	5 points.
E. Feet, toes, shank.....	5 points.
F. Tail, proper carriage, condition.....	5 points.
G. Place bird on table and pose for judge	5 points.
4.) Exhibitor's appearance and attitude20 points.
5.) Exhibitor's speaking ability and knowledge of subject	15 points.
Total100 points.

DIVISION HH - RABBITS

SUPERINTENDENT: Bonnie Werth

ASSISTANT SUPERINTENDENT: Kylie Dreiling, Megan Herrman

4-H Rabbits will enter the barn Monday, July 12, 7:00 – 8:00 p.m. On clean up night, the previous year's Herdsmanship Award winning club will choose and label their pens. All rabbits will be pre-entered in the on-line system prior to the Ellis Co. Fair.

Open Class Poultry and Rabbits will enter Monday, July 12 – 8:00 – 8:30 p.m. **All entries will be released Sunday morning, July 18, 8 a.m.** Release and clean-up is a group project. **All exhibitors in 4-H and Open Class are asked to arrive by 8 a.m. to assist with the clean-up process.** Failure to do so will result in forfeiture of stall deposits. 4-H Rabbits will be judged at 8:00 a.m. on Wednesday, July 14.

1. Each rabbit is to be legibly and permanently tattooed in its left ear for identification.
2. Any rabbit shown at the Fair must have been owned and **in the possession of the 4-H'er before June 22** of the current year.
3. Each 4-H member may enter a total of 6 rabbits in the 4-H Division.
4. One entry per class, per variety, per breed may be shown. (example: May show one junior New Zealand white doe, one junior New Zealand red doe and one junior New Zealand black doe.)
5. The following breeds may be exhibited in the designated classes: New Zealand, Champagne, Californian, Chinchilla, Satins, Silver Martens, Florida Whites, Dutch, Dwarfs and other purebreds recognized by the American Rabbit Breeders Assoc.
6. Colored and white fur entries must be made from rabbits that are entered in the regular breed classes, 1 through 6.
7. An entry shown in the poultry / rabbit barn can't be checked out and shown in the pet show.
8. 4-H member must be 9 years old to compete at the State Fair and have at least a blue ribbon placing in Ellis Co. 4-H or Open Class shows. 4-H'ers may qualify rabbits for entry at the Kansas State Fair at area qualifying shows. The county hosting the show must certify the results of the show and provide them directly to the Cottonwood District – Hays office prior to the State Fair entry deadline of August 1.

- *Class 1 Junior buck, under 6 months of age
- *Class 2 Junior doe, under 6 months of age
- *Class 3 6 - 8 month old buck
- *Class 4 6 - 8 month old doe
- *Class 5 Senior buck, 8 months of age or over
- *Class 6 Senior doe, 8 months of age or over
- *Class 7 Meat pen-3 rabbits, all one recognized breed and variety (broken varieties must be same color), maximum weight 5 ½ pounds each. Will be judged on their meat qualities, condition, uniformity and fur.
- *Class 8 Doe and litter
- *Class 9 Normal white fur
- *Class 10 White Satin fur
- *Class 11 White Rex fur
- *Class 12 Normal colored fur
- *Class 13 Colored Satin fur
- *Class 14 Colored Rex fur
- Class 15 Mixed breeds

If quality merits, there will be a best of breed and a best of opposite sex providing there is a minimum of 5 rabbits in each breed. There will be a Best of Show and a

Best Opposite Sex. (Fur and meat pens are not eligible for this award). Even if a breed does not meet the minimum number-this does not eliminate the rabbit from competing in or for the overall Best of Show.

RABBIT SHOWMANSHIP

Open to any 4-H'er exhibiting in 4-H rabbit classes. In showmanship, you are eligible to show an animal that you have entered in the 4-H division.

Class 16 Novice Showmanship - first time in showmanship (no age restriction)

Class 17 Junior Showmanship - ages 7 to 13

Class 18 Senior Showmanship - ages 14 and older

Showmanship scorecard will consist of the following:

1.	Carrying the rabbit to and from the judging table	10 points
2.	Examination of rabbit:	
	a. with rabbit in sitting position..	10 points
	b. turn rabbit on back	20 points
	c. return to sitting position.....	10 points
	d. pose rabbit	20 points
3.	Condition of animal.....	10 points
4.	Appearance of showman	20 points
	TOTAL	100 points

4-H Division List of Contents

Introduction	1
CHARACTER COUNTS! in 4-H	2
General Rules	4
4-H Ribbon Placement	6
State Fair Entries	6
Clothing Construction	7
Cloverbuds	8
Energy Management – Electric, Small Engines, Alternative Energy	8
Entomology & Bee Science.....	10
Fashion Revue	15
Fiber Arts	17
Foods & Nutrition	18
Forestry	23
Geology	25
Home Environment	28
Life Skills Judging	28
Notebooks, Posters & Displays	29
Photography	31
Plant Science – Crops & Horticulture ..	33
Shooting Sports	37
4-H STEM – General Rules	38
4-H STEM – Astronomy	39
4-H STEM – Computers	40
4-H STEM – Robotics	43
4-H STEM – Rocketry	45
4-H STEM – Unmanned Aerial Systems UAS.....	52
4-H STEM – Ag Mechanics	53
4-H STEM – Architectural Block Construction. ...	56
Visual Arts	58
Wildlife	60
Woodworking	60
General Livestock Rules	61
Herdsmanship	64
Beef	65
Dairy	69
Goats	69
Horse	71
Sheep	73
Swine	74
Champion Fitting & Showing	75
Animal Management Skill-a-thon	75
Livestock Judging	76
Cats & Small Pets.....	76
Dogs	77
Poultry	79
Rabbits	81