

will have 40 shots with 5 shot per target on eight targets. Junior pistol shooters may shoot from a table or rest. And Intermediate may shoot with two hands. To facilitate fair preparations, shooters must declare disciplines they wish to shoot, on a sheet provided to shooters, 2 weeks prior to the event to the Extension Office.

E-904-009 Air Pistol Junior - 10-11 years old by January 1 of current year.

E-904-010 Air Pistol Intermediate - 12-13 years old by January 1 of current year.

E-904-011 Air Pistol Senior - 14 and over by January 1 of current year.

Archery Division

All archers will shoot a total of 30 arrows with six ends of 5 arrows each. Junior archers will compete at 10 yards, Intermediate and senior archers will compete at 20 yards. (Exceptions: In accordance with the state competition, intermediate basic bow archers will shoot from 10 yards). Male and female shooters will shoot in a combined class. Scoring will be on a single spot target or a five spot target. X's serve as tie breaker. Scoring will be done by groups of archers on scorecards and signed by the shooter prior to handling them into the scoring table. The maximum draw weight for any bow in 4-H archery is 60 pounds. Nocking points shall be snap-on type, shrink tubing, thread or dental floss tied or served on the string serving. All arrows shall be identical in length, weight, diameter, and fletching with allowance for wear. Color does not matter. Screw-in or glued arrow points shall be used. 4-H dress and shoes or boots is required. Archers are limited to two classes. To facilitate fair preparations, shooters must declare disciplines they wish to shoot, on a sheet provided to shooters, 2 weeks prior to the event to the Extension Office.

Basic Bow

E-904-012 Archery Junior - 8-11 years old by January 1 of the current year

E-904-013 Archery Intermediate - 12-13 years old by January 1 of the current year

E-904-014 Archery Senior - 14-18 years old by January 1 of the current year

Any bow, compound, recurve, or long bow that is shot with fingers, tabs or glove and without sights. Bows must be free of any sights, marks, or blemishes to aid in sighting. Stabilizers are permitted. No arrow rest may extend more than ¼" above arrow (Exception: In accordance with state competition, whisker biscuits will be allowed).

Freestyle Limited Recurve (formerly referred to as Olympic recurve)

E-904-015 Freestyle Limited Recurve Junior - 8-11 years old by January 1 of the current year

E-904-016 Freestyle Limited Recurve Intermediate - 12-13 years old by January 1 of the current year

E-904-017 Freestyle Limited Recurve Senior - 14-18 years old by January 1 of the current year

Competitors must use recurve or long bows shot with fingers, tabs, or gloves. Levels, string peeps, and electronics are not allowed. Stabilizers and counter balances are allowed. Arrow rest that extend more than ¼" above the arrow are not allowed. Any sights with no magnification may be used. Archers shall touch the arrow, when nocked, with the index finger against the nock, such as the three fingers below the arrow draw.

Freestyle Limited

E-904-018 Freestyle Limited Junior - 8-11 years old by January 1 of the current year

E-904-019 Freestyle Limited Intermediate - 12-13 years old by January 1 of the current year

E-904-020 Freestyle Limited Senior - 14-18 years old by January 1 of the current year

Any sights or scopes, any stabilizer, any rest, and release aids are limited to fingers, tabs, and gloves. NO mechanical releases allowed.

Freestyle

E-904-021 Freestyle Junior - 8-11 years old by January 1 of current year

E-904-022 Freestyle Intermediate - 12-13 years old by January 1 of current year

E-904-023 Freestyle Senior - 14-18 years old by January 1 of current year.

Any type of sight or scopes, any stabilizer, any rest, and any release aid may be used provided it is hand – operated.

Bow Hunter Freestyle

E-904-024 Bow Hunter Freestyle Junior - 8-11 years old by January 1 of the current year

E-904-025 Bow Hunter Freestyle Intermediate - 12-13 years old by January 1 of the current year

E-904-026 Bow Hunter Freestyle Senior - 14-18 years old by January 1 of the current year.

Same as Freestyle except stabilizers cannot exceed 12 inches from the face of the bow. Pin sights only may be used. Sights may not be adjusted after the first scoring arrow is shot.

Small Bore Rifle Division

Rifle competition will be held at a site to be determined, and if one is available. Youth must be 10 years of age and be accepted into the rimfire program to participate. Rimfire rifle division will be shot according to the NRA smallbore rifle rules with the following exceptions: distance will be 50 yards, standing position only, and the match will consist of 30 shots for record on a single spot target. All firearms must be factory .22 rifles, no thumbhole stocks, adjustable butt stocks or cheek pieces.

No Stingers or other Ultra Velocity ammunition allowed. Guns and ammunition will be inspected prior to the match. To facilitate fair preparations, shooters must declare disciplines they wish to shoot, on a sheet provided to shooters, 2 weeks prior to the event to the Extension Office.

Class O Open Sight Rifles classes:

E-904-027 Open Sight Rifles - Junior 10-11 years old by Jan. 1 of the current year.

E-904-028 Open Sight Rifles - Intermediate 12-13 years old by January 1 of current year.

E-904-029 Open Sight Rifles - Senior 14 & over by January 1 of the current year.

E-914-930 Scoped Rifles - Junior 10-12 years old by January 1 of the current year.

E-914-931 Scoped Rifles - Intermediate 12-13 years old by January 1 of the current year.

E-914-932 Scoped Rifle - Senior 14 & over by January 1 of the current year.

Each contestant will be allowed 10 minutes for preparation and sighter shots. 15 minutes will be allowed for record shots. Rifles are limited to rimfire rifles. (Retail value of \$1000 or less) which shoot .22 caliber only. (Must be lead bullets; no hyper-velocity, hollow-point, ballistic or stingers).

DEPARTMENT E – SAFETY

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

Division 440 – Safety

E-440-001 First-Aid Kit

A first aid kit is a good way to organize supplies in an emergency. The kit should be assembled in a container appropriate for the kit's intended use. A description of where the kit will be stored and examples of specific emergencies for that situation should be included in the exhibit. The kit should include a written inventory and purpose statement for included items. Items should cover the following areas: airway and breathing, bleeding control, burn treatment, infectious disease protection, fracture care and miscellaneous supplies. Use Citizen Safety manual, 4-H 425, page 6 & 7 for guidance.

Kits containing any of the following will be automatically disqualified:

1. Prescription medications (If the kit's purpose is to provide medication for someone with special needs, explain in the written description and inventory, but remove the medication.)
2. Materials with expiration dates on or before the State Fair judging date. (This includes sterile items, non-prescription medications, ointments, salves, etc. Articles dated month and year only are considered expired on the last day of that month.)
3. Any controlled substance. Scoresheet SF110

E-440-002 Disaster Kit (Emergency Preparedness)

Disaster Kits must contain the materials to prepare a person or family for emergency conditions caused by a natural or man-made incident. Selection of materials is left to the exhibitor. Family or group kits must have enough material or items for each person. A description of the kit's purpose, the number of people supported, and a list of contents is required. Youth are encouraged to test their kit by challenging their family to try to survive using only the included materials for the designated time. If tested, share that experience in kit documentation. Please include an explanation of drinking water needs for your disaster kit. Do not bring actual water to the fair in the kit. Scoresheet SF111.

E-440-003 Safety Scrapbook

The scrapbook must contain 15 news articles from print and/or internet sources about various incident types. Mount each clipping on a separate page accompanied by a description of events leading to the incident and any measures that might have prevented it. The scrapbook should be bound in a standard size hardcover binder or notebook for 8.5" x 11" size paper. Correct sentence structure, readability, and thorough explanations are an important part of judging. Scoresheet SF292

E-440-004 Safety Experience

The exhibit should share a learning experience the youth had related to safety. Examples could be

participating in a first aid or first responder training, a farm safety day camp, babysitting workshop or similar event; scientific experiment related to safety; or the youth's response to an emergency situation. The exhibit should include a detailed description of the experience, the youth's role, some evidence of the youth's leadership in the situation and a summary of the learning that took place. Exhibits may be presented in a poster with supplemental Rev. 12/19/2014 documentation, a notebook including up to ten pages of narrative and pictures, or a multimedia presentation on a CD lasting up to five minutes. Scoresheet SF190

E-440-005 Careers in Safety

The exhibit should identify a specific career area in the safety field and include education and certification requirements for available positions, salary information, demand for the field and a summary of the youth's interest in the field. Examples of careers include firefighters, paramedics, emergency management personnel, some military assignments, law enforcement officers, emergency room medical personnel, fire investigator and more. It is recommended youth interview a professional in the field in their research. Additional research sources might include books, articles, career websites, job-related government websites or interviews with career placement or guidance counselors. Exhibits may be presented in a poster with supplemental documentation, a notebook including up to ten pages of narrative and pictures, or a multimedia presentation on a CD lasting up to five minutes. Scoresheet SF191

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

Division 450 – Fire Safety

E-450-001 Fire Safety Poster

This is a home floor plan drawn to scale showing the primary and secondary escape routes and where fire extinguishers and smoke detectors are located. Draw every room: include all doors and windows. Use black or blue arrows showing primary escape routes from each room. Use red arrows showing secondary routes to use if the primary routes are blocked. Primary and secondary escape routes must lead outside to an assembly location. Documentation should include evidence the escape plan has been practiced at least four times. Posters must be constructed of commercial poster board at least 11" x 14" but not larger than 22" x 28". Scoresheet SF269

E-450-002 Fire Safety Scrapbook

This scrapbook must contain 10 news articles from print and/or internet sources about fires to residential or commercial properties or landscapes. Mount each clipping on a separate page accompanied by a description of events leading to the incident and any measures that might have prevented it. The scrapbook should be bound in a standard size hard cover binder or notebook for 8.5" x 11" size paper. Correct sentence structure, readability and thorough explanations are an important part of judging. Scoresheet SF270

E-450-003 Fire Prevention Poster

Posters should promote a fire prevention message and be appropriate to display during National Fire Prevention Week or to promote fire safety at specific times of the year (Halloween, 4th of July, etc.). Originality, clarity and artistic impression will all be judged. Do not include live fireworks, matches or other flammable/explosive/hazardous materials. Any entry containing this material will be disqualified. Poster must be constructed of commercial poster board at least 11" x 14" but not larger than 22" x 28". Scoresheet SF268

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

Division 902 – ATV & Bicycle Safety

All fair exhibits and posters should include the name, age, year, full address and county on the back side.

E-902-001 All Terrain Vehicles (ATV) Educational Display - An educational presentation on some aspect of the project. This exhibit may be presented in poster 14" x 22" or display form.

E-902-002 Cycling or Bicycle Educational Display - An educational presentation on some aspect of the project. This exhibit may be presented in poster 14" x 22" or display form.

DEPARTMENT G – AGRONOMY (CROPS & RANGE)

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

Individuals in the Crop Production, Field Crops project may exhibit grain or plants or prepare an educational display representing their project.

The purpose of these exhibits is to demonstrate to the public the benefits from the study and application

of crop, weed, range and soil sciences to solving problems in management, conservation, sustainability and environmental protection. For guidelines on specific projects, refer to appropriate project manuals.

Division 750 – FIELD CROPS:

Individuals in Crop Production, Field Crop Project may exhibit grain or plants or prepare an educational display representing their project.

Grain or Plant Exhibits - Classes 1-5:

- A. A completed Crop Production Worksheet (available at <https://cropwatch.unl.edu/Youth/Documents/Crop%20Production%20Project%20Worksheet%20Final.pdf>) must accompany grain and plant exhibit or it will automatically be deducted one ribbon placing. The essay worksheet must include the exhibitors name and address, county, plant hybrid or variety, plant population, whether crop production was irrigated or dryland, and general information including farm cropping history, soil type and weather effects. The worksheet also must include an economic analysis of the project, listing individual expenses and income, on a per acre basis. Other topics to discuss are the selection of variety or hybrid, impacts of tillage and conservation practices, inputs (fuel, fertilizer, irrigation, labor, pesticides, etc.), any observations made during the growing season, and what you learned from your crops project.
- B. The worksheet counts as 50% of the total when judged. Worksheet must be the original work of the individual exhibitor or it will be deducted one ribbon placing. Attach the worksheet to the entry in a clear plastic cover such that it can be read without removing it from the cover. In addition to the worksheet, grain and plant exhibits will be judged on condition, appearance (i.e. disease and insect damage, grain fill), uniformity (size, shape, color, maturity), and quality of exhibit. Refer to Scoresheet SF264.
- C. Grain exhibits must be one gallon per sample. Grain exhibits harvested in the fall (e.g. corn or soybeans) may be from the previous year's project.
- D. Plant exhibits, with the exception of ears of corn, must be the result of the current year's project.
- Corn - 10 ears or 3 stalks (cut at ground level with no roots or soil and bound together);
 - Grain Sorghum - 4 stalks (cut at ground level and bound together);
 - Soybeans - 6 stalks (cut at ground level and bound together);
 - Small grains (oats, barley, wheat, triticale) - sheaf of heads 2 inches in diameter at top tie with stems about 24 inches long.
 - Other crops (alfalfa, millet, etc.) - sheaf of stems 3 inches in diameter at top tied with stems cut at ground level or half size small square bale.

G-750-001 Corn (includes yellow, white, pop, waxy, or any other type) Scoresheet SF264

G-750-002 Soybeans Scoresheet SF264

G-750-003 Oats Scoresheet SF264

G-750-004 Wheat Scoresheet SF264

G-750-005 Any other crop (includes grain sorghum, alfalfa, millets, barley, rye, triticale, amaranth, dry beans, sugar beet, mung bean, canola, forage sorghum, safflower, etc.) Scoresheet SF264

Division 750 – Displays - Classes 6-10:

- A. The purpose of the display is to tell an educational story to those that view the display. The display is a visual representation (pictures, charts, graphs) no larger than 28" wide by 28" tall on plywood or poster board. The display should be neatly titled. Make sure to label display with exhibitor's name, address, and county on back side. Explain pictures and graphs clearly and concisely. Consider creativity and neatness. Refer to Scoresheet SF259
- B. Each display must have a one page essay (minimum) explaining why the exhibitor chose the area of display and what they learned from their project. Include any references used. The essay should be in a clear plastic cover with the exhibitor's name outside. If a display does not have any essay, it will automatically be deducted one ribbon placing.
- G-750-006 Crop Production Display** - The purpose of this class is to allow original and creative exhibits that contain educational information about crop production aspects, such as crop scouting, alternative crops, pest management, etc. Scoresheet SF259
- G-750-007 Crop Technology Display** - Display information about aspects of technology used in crop production, such as genetic engineering, crop breeding, GPS, yield mapping, computers, etc. Scoresheet SF259
- G-750-008 Crop End Use Display** - Display information about the final product or end uses for a crop, such as food, feed, fuel or other products. (i.e. corn can be processed into livestock feed, ethanol, plastics, etc. or soybeans can be processed into bio-diesel, pet bedding, crayons, oil, etc.) Scoresheet SF259

G-750-009 Water or Soil Display - Display information about water or soils, such as how soils are being used for crop production, range, conservation, wildlife, or wetland use, or ways to protect or conserve water and soil resources. Scoresheet SF259

G-750-010 Career Interview Display - The purpose of this class is to allow youth to investigate a career in agronomy. Youth should interview one person that works with crops about such topics as what parts of their job do they enjoy or dislike, why did they choose that career, what was their education, etc. Include a picture of the person interviewed. Scoresheet SF259

NEW: Special Agronomy Project

A. Youth experience a crop that is grown, was grown or has the potential to be grown in Nebraska by growing it, researching traits of that crop and determine viability of that crop in the part of the state they live.

B. Each year seeds will be mailed to extension offices or ag ed classrooms across the state, as ordered by that location. Offices will distribute to youth on a first come - first serve basis. A different seed will be selected every year. Youth will grow seeds in their garden or pots. Written resources materials will be available for youth, in addition to virtual, live or recorded videos/field trips. Youth will be eligible to enter an exhibit at both the county and/or state fair in the agronomy project area.

G-750-011 Special Agronomy Project - Educational Exhibit - (SF259) - Educational exhibit based on what was learned from the project. Present information on a poster 14"x22" either vertical or horizontal arrangement or in a clear plastic report cover. The 4-H member's name, age, full address, and county must be on the back of the poster or report cover. Each display must have a one-page essay (minimum) explaining why the exhibitor chose the area of display and what they learned from their project. Include any references used.

G-750-012 Special Agronomy Project - Video Presentation - 4-H exhibitor designs a multimedia presentation related to the crop. This could include narration of the growing process, presenting facts about the crop or any other innovative multimedia practices. The presentation should be at least 2 minutes in length and no more than 5 minutes in length, appropriate graphics, sound and either a video clip, animation or voice over and/or original video clip. Any of the following file formats will be accepted: mp4, .mov, .ppt, or .avi.

G-750-013 Special Agronomy Project (Freshly Harvested Crop) - Plant exhibits must be the result of the current year's project. Depending on the type of crop selected for the current year:

Corn - 10 ears or 3 stalks (cut at ground level with no roots or soil and bound together)

Grain Sorghum - 4 stalks (cut at ground level and bound together)

Soybeans - 6 stalks (cut at ground level and bound together)

Small grains (oats, barley, wheat, triticale) - sheaf of heads 2 inches in diameter at top tie with stems about 24" long.

Other crops (alfalfa, millet, etc.) - sheaf of stems 3 inches in diameter at top tied with stems cut at ground level.

Supporting documentation (½ to 1-page in length) should include the following:

Economic Analysis and/or research that supports feasibility of this crop in Nebraska or how the crop has evolved over time.

Other topics to discuss are past/current commercial production of this crop. This includes: the selection of variety or hybrid, impacts of tillage and conservation practices, inputs (fuel, fertilizer, irrigation, labor, pesticides, etc.), any observations made during the growing season about this crop and what you learned from your crops project. This ½ to 1-page summary counts as 50% of the total when judged. In addition to the summary, grain and plant exhibits will be judged on condition, appearance (i.e. disease and insect damage, grain fill), uniformity (size, shape, color, maturity), and quality of exhibit.

Rules

- The crop of the year for 2022 is broomcorn sorghum.

Division 751 – Weed Science

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

Any individuals in the Conservation, Environment 1, 2 or 3, Range, Reading the Range 1 or Using Nebraska Range 2, or Crop Production, Field Crops projects may exhibit a weed book or weed display. At least 15 of the specimens must represent this year's work. For assistance identifying plants, participants can use the Nebraska Department of Agriculture's "Weeds of Nebraska and the Great Plains" (1994) or "Weeds of the Great Plains" (2003).

Division 751 – Books - Classes 1-2:

- A. Plants must be mounted on sheets that are no larger than 14" wide x 14" high. Proper plant mount should include root as well as stem and leaf tissue. Plants should be glued rather than taped and the mounts should be protected with a clear cover.
- B. Exhibits will be judged based on completeness of plant mount, accuracy of identification, label, neatness and conformity to exhibit requirements. Refer to Scoresheet SF261.
- C. Each completed mount must have the following information (see example below) in the lower right corner of the mounting sheet: 1. Scientific name (in italic or underlined), with authority, 2. Common name, 3. County of collection, 4. Collection date, 5. Collector's name, 6. Personal collection number, indicating the order that plants were collected in your personal collection. 7. Other information depending on class selected, i.e., noxious, life form. This information should be typed or printed neatly.

Scientific name: <u><i>Abutilon theophrasti</i> Medik.</u>
Common name: Velvetleaf
County of collection: Hall County
Collection date: 6 July 20XX
Collector's name: Dan D. Lion
Personal collection number: 3
Life Cycle: Annual

G-751-001 Weed Identification Book - A collection of a minimum of 15 plant mounts and including at least two of the following prohibited noxious weeds (Canada thistle, musk thistle, plumeless thistle, salt cedar, leafy spurge, purple loosestrife, diffuse knapweed, spotted knapweed, Japanese knotweed, Bohemian knotweed, giant knotweed, sericea lespedeza, or phragmites), and at least three weeds that are a problem primarily in lawns. Scoresheet SF261

G-751-002 Life Span Book - A collection of 7 perennials, 1 biennial, and 7 annual weeds. Scoresheet SF261

Division 751 – Displays

A. The purpose of the display is to tell an educational story to those that view the display. The display is a visual representation (pictures, charts, graphs) no larger than 28" by 28" on plywood or poster board. The display should be neatly titled. Make sure to label display with exhibitor's name, address, and county on back side. Explain pictures and graphs clearly and concisely. Consider creativity and neatness. Refer to Scoresheet SF 259.

B. Each display must have a one page essay (minimum) explaining why the exhibitor chose the area of display and what they learned from their project. Include any references used. The essay should be in a clear plastic cover with the exhibitor's name outside. If a display does not have an essay, it will automatically be deducted one ribbon placing.

G-751-003 Weed Display - The purpose of this class is to allow original and creative exhibits that contain educational information about weeds, such as interesting information about a weed species, the effects of weed control, herbicide resistant weeds, what makes a weed a weed, or uses for weeds. Scoresheet SF259

DEPARTMENT D – RANGE

The purpose of this category is to help 4-H'ers identify and collect range plants. In addition, participants will learn the basics of range management and Nebraska's range.

Division 330 – Range Management

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

- A. Each exhibit must be properly identified with Unit and Class.
- B. All plant displays and display covers must be the result of the current year's work.
- C. Plant identification and lists of appropriate plants in each category (grasses, forbs, shrubs and grass-like plants) can be found in the Range Judging Handbook and Contest Guide (EC150, Revised July 2016) and Common Grasses of Nebraska (EC 170) and Common Forbs and Shrubs of Nebraska (EC 118).
- D. The purpose of these exhibits is to demonstrate to the public the benefits from the study and application of crop, weed, range and soil sciences to solving problems in management, conservation, sustainability and environmental protection. For guidelines on specific projects, refer

to appropriate project manuals.

E. Scoresheets, forms, additional resources can be found at <http://go.unl.edu/ne4hrange>.

Division 330 – Books (Classes 1-6)

- A. For books, plants must be mounted on sheets that are no larger than 14" wide x 14" high. Plants should be glued rather than taped and the mounts should be protected with a clear cover. Proper plant mount should include root, as well as stem and leaf tissue.
- B. Exhibits will be judged based on completeness of plant mount, accuracy of identification, labeling, neatness and conformation to project requirements.
- C. Each completed mount must have the following information (see example below) in the lower right corner of the mounting sheet: 1) Scientific name (in italic or underlined), with authority, 2) Common name, 3) County of collection, 4) Collection date, 5) Collector's name, 6) Personal collection number, indicating order that plants were collected in your personal collection and 7) Other information depending on class selected, i.e., value and importance, life span, growth season, origin, major types of range plants. This information should be typed or printed neatly.

Scientific name: <i>Schizachyrium scoparium (Michx.) Nash</i>
Common name: Little bluestem
County of collection: Hall County
Collection date: 6 August 20XX
Collector's name: Joe Smith
Personal collection number: 37
Value & Importance: Livestock Forage: High, Wildlife Habitat: High, Wildlife Food: Medium Or Life Span: Perennial Or Season of Growth: Warm Season Or Origin: Nature

D-330-001 Value and Importance for Livestock Forage and Wildlife Habitat and Food Book – A collection of 12 different plant mounts with 4 classified as high value, 4 as medium value and 4 as low value for livestock forage, wildlife habitat or wildlife food. Value and importance classifications can be found in the Range Judging Handbook and Contest Guide Appendix Table 1 (EC150, Revised July 2016) starting on page 42. Plants can consist of any combination of grasses, grass-like plants, forbs or shrubs. Assemble plant mounts in order of high, medium and low value and importance. Label each plant mount with its value and importance classifications for each of the three areas: Livestock Forage, Wildlife Habitat, Wildlife Food. Scoresheet SF260

D-330-002 Life Span Book – A collection of 6 perennial plant mounts and 6 annual plant mounts selected from grasses or forbs. Scoresheet SF260

D-330-003 Growth Season Book – A collection of 6 cool-season grass mounts and 6 warm-season grass mounts. Scoresheet SF260

D-330-004 Origin Book – A collection of plant mounts of 6 native range grasses and 6 introduced grasses. Introduced grasses are not from North America and often used to seed pastures. Scoresheet SF260

D-330-005 Major Types of Range Plants Book – A collection of plant mounts of 3 grasses, 3 forbs, 3 grass-like and 3 shrubs. Scoresheet SF260

D-330-006 Range Plant Collection Book – A collection of 12 range plant mounts with something in common (i.e. poisonous to cattle, or historically used as food by Native Americans, or dye plants, or favorite antelope forage, etc.) Include a short paragraph in the front of the book which describes what the plants have in common and why you have chosen to collect them. Scoresheet SF260

Division 330 – Displays (Class 7)

A. The purpose of the display is to tell an educational story to those that view the display. The display is a visual representation (pictures, charts, graphs) no larger than 28" by 28" on plywood or poster board. The display should be neatly titled. Make sure to label display with exhibitor's name, address, and county on back side.

D-330-007 Parts of a Range Plant Poster – Mount a range plant on a poster board. Label all the plant parts. Include the plant label in the lower right corner including the scientific and common name of the plant. Put your name and 4-H county on the back of the poster. Scoresheet SF259

Division 330 – Boards (Classes 8-9)

A. Boards should be no larger than 30" wide by 36" tall. Boards should be adequately labeled.

D-330-008 Special Study Board – A display of the results of a clipping study, a degree of use study, range site study, etc. A short essay must accompany the display to explain the reason for the study, what was learned and study results and should be placed in a sheet cover attached to the board. Scoresheet SF260.

D-330-009 Junior Rancher Board – This exhibit should include the ranch map with record book or an appropriate educational display on some phase of rangeland or livestock management. A short essay must accompany the display to explain the purpose of the rancher board, what was learned, etc. Scoresheet SF 260

DEPARTMENT H – ENTOMOLOGY

Division 800 – Entomology

Entomology exhibits give 4-H'ers the opportunity to demonstrate their knowledge about insects and insect displays. This category has multiple projects that allows 4-H'ers to progress over numerous years.

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

Specimens in display collections should be mounted properly and labeled with location and date of collection, name of collector, and order name. Follow mounting and labeling instructions in the Nebraska 4-H Entomology manual online as a pdf file. (<http://4h.unl.edu/web/4hcurriculum/entomology>). Scoresheets and resources can be found at <https://go.unl.edu/ne4hentomology>
Boxes are preferred to be not more than 12" high x 18" wide, and landscape orientation so they fit in State Fair display racks. Purchase of commercially-made boxes is allowed. All specimens must be from the collector.

H-800-001 Entomology Display, First Year Project

Collection to consist of 25 or more different kinds (species) of insects representing at least 6 orders. Limit of one box. Scoresheet SF 186

H-800-002 Entomology Display, Second Year Project

Collection to consist of a minimum of 50 kinds (species) of insects representing at least 8 orders. Replace damaged or poorly mounted specimens. At least 25 species must be present from after July 1 of the previous year. Limit 2 boxes. Scoresheet SF186

H-800-003 Entomology Display, Third Year or more project

Collection to consist of minimum of 75 kinds (species) of insects representing at least 10 orders. Replace damaged or poorly mounted specimens. At least 25 species must be present from after July 1 of previous year. Limit of 3 boxes. Scoresheet SF186

H-800-004 Special Interest or Advanced Insect Display

Educational display developed according to personal interests and/or advanced identification capability. This also is an opportunity to highlight favorite insects in a creative arrangement. Insects should conform to pinning and mounting standards as in Classes 1-3 and be protected in an insect box. Each specialty display should include names of the insects, interesting information about them, and why the display was made. Advanced identification collections should have insects grouped with labels that correspond with identification level (e.g. family, genus, species). A specialty collection may consist of insects by taxonomic group (e.g. butterflies, grasshoppers, dragonflies, scarab beetles) or by host, subject or habitat (e.g. insect pests of corn, aquatic insects, insect mimicry, insect galls, insects from goldenrod, insect pollinators, etc.). Scoresheet SF187

H-800-005 Insect Habitats

Habitats consist of any hand-crafted objects, made of natural or artificial materials, placed outdoors, which promote or conserve insects in the environment. Insects may include bee pollinators, butterflies, beneficial insects, etc. A one-page report describing activities must accompany the exhibit. Scoresheet SF186

H-800-006 Macrophotography

Subjects should be insects, spiders or other arthropods, or any nests, webs or constructions they make. All exhibits prints should be either 8"x10" or 8½" x 11" and mounted on rigid, black 11" x 14" poster or matt board. Either orientation is acceptable. No frames or mat board are allowed. A caption of a few sentences should explain the subject, and be printed on white paper, glued below the print on the poster board. Scoresheet SF189

H-800-007 Insect Poster/Display Exhibits

Exhibits can be posters or three-dimensional displays, and artistic creativity is encouraged. Posters should be no larger than 22" x 28". They should be instructional and can be attractive and have pictures, drawings, charts, or graphs. Posters and displays may show any aspect of insect life, habitat, or related conservation or management. Examples include life history and other facts

about an insect; insect anatomy; how to manage insects in a farm, home, lawn, or garden setting; experiences rearing one kind of insect; survey of an important insect; insect behavior (ex. nesting, finding food, mobility, defenses, etc.); habitats (e.g. forests, grasslands, wetlands, rivers, or lakes) and what insects are found there, etc. Three-dimensional displays, such as dioramas, sculptures, models or decorative boxes should have a page of explanatory information accompanying them and fit within a 22" x 28" area. Scoresheet SF190

H-800-008 Reports or Journals

Reports and journals should be in a 3-ring binder. A report may be informational, that is, an original article about a favorite insect, a history of insect outbreaks, diseases caused by insects, insects as food, etc. Or, it may be a research report about an investigation or experiment done in a scientific manner. It then should have a basic introduction of the insect studied, methods used, observations, and results of the project. Tables, graphs and images are helpful to include. A journal is an observational study over a period of time with personal impressions. It may cover watching changes of kinds in butterflies over the summer, rearing a specific insect from egg to adult, managing a bee hive, observations of insects in a specific habitat, accounts of insect behavior in a forest or flower garden, etc. Scoresheets SF191

Division 810 - Special Entomology Project

H-810-001 - Special Entomology Project Educational exhibit based on what was learned from the project. Present information on a poster no larger than 22" x 28" either vertical or horizontal arrangement or in a clear plastic report cover. The 4-H member's name, age, full address, and county must be on the back of the poster or report cover. Reports may include life cycle, distribution of the insect, insect behavior (ex. nesting, finding food, mobility, defenses, etc.); habitats (e.g. forests, grasslands, wetlands, rivers, or lakes). May include a certain species or broad overview of the family or group of insects.

H-810-002 - Special Entomology project display The current years' Special Entomology Project pinned species along with a one to two report of what was learned from researching the insect type. Reports may include life cycle, distribution of the insect, insect behavior (ex. nesting, finding food, mobility, defenses, etc.); habitats (e.g. forests, grasslands, wetlands, rivers, or lakes). May include a certain species or broad overview of the family or group of insects.

The insect of the year for 2022 is the tiger beetle.

DEPARTMENT H – VETERINARY SCIENCE

Division 840 – Veterinary Science

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

The purpose of a Veterinary Science exhibit is to inform the public about a common health problem of animals, a veterinary science principle, or public health/zoonotic diseases. Do not confuse veterinary science exhibit topics with animal husbandry, history or production topics.

A Veterinary Science exhibit may consist of a poster, notebook or a display. The exhibit may represent material from any of the Veterinary Science projects including a entry level exhibits from Unit 1.

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

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

Veterinary Science Posters: This exhibit presents the viewer with a design that is simple and direct, unlike a display that usually presents more information. A poster should not exceed 22" x 28" and may be either vertical or horizontal.

Veterinary Science Display: A display may include but is not limited to: a 3-dimensional exhibit, a scale model, the actual product (for example skeleton; teeth; samples of leather, fur or dried skin damaged by disease or parasites) or a notebook. A display is not a poster. A display may be mounted on poster board not to exceed 22" x 28" or on 1/4" plywood or equivalent that does not exceed 24" high or 32" wide or in a three ring binder or another bound notebook format.

Appropriate Veterinary Science Topics:

- Maintaining health
- Specific disease information
- Photographic display of normal and abnormal characteristics of animals
- Animal health or safety
- Public health or safety
- Proper animal management to ensure food safety and quality
- Efficient and safe livestock working facilities
- Or a topic of the exhibitors choosing related to veterinary medicine or veterinary science

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

Scoresheets, forms, contest study materials and additional resources can be found at <https://go.unl.edu/ne4hvetscience>.

H-840-001 4-H Veterinary Science Large Animal Poster, Notebook, or Display Scoresheet SF119

H-840-002 4-H Veterinary Science Small Animal/Pet Poster, Notebook, or Display Scoresheet SF119

SCIENCE, ENGINEERING, TECHNOLOGY AND AEROSPACE

GENERAL INFORMATION FOR DEPARTMENT H, DIVISIONS 850, 860, 861, 870, 880, 890, 900, 911, 920:

- The name and county of each exhibitor should appear separately on the back of each board, poster, or article, and on front cover of the notebooks so owner of exhibit may be identified if the entry tag is separated from the exhibit.
- Each individual is limited to one exhibit per class.
- Several classes require a display board which should be a height of 24 inches and not to exceed 1/4 inch thickness. A height of 23 7/8 inches is acceptable to allow for the saw left width if two 24 inches boards are cut from one end of a 4 foot x 8 foot sheet of plywood. Nothing should be mounted within 3/4" of the top or bottom of the board. (Example: woodworking, and electricity)
- Fabricated board such as plywood, composition board, or particle-type lumber may be used for demonstration displays.
- Demonstration boards should be sanded and finished to improve their appearance. The finish on a demonstration board will be judged as a woodworking exhibit.
- Demonstration boards should include an overall title for the display, plus other necessary labeling.
- Reports should be written using the scientific method whenever possible (Background, the Question or hypothesis, what you plan to do and what you did, Method used and observations. Results: what you learned. All reports should be computer generated and enclosed in a clear, plastic cover. The reports should be attached securely to the display.

DEPARTMENT - SCIENCE, ENGINEERING, TECHNOLOGY (SET)

Division 930 - Science Engineering Technology (SET) Careers

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

H-930-001 Careers Interview

Interview someone who is working in any field associated with science, engineer and technology and research that career (i.e. computer programmer, architect, engineer, pilot, etc.). Interviews can either be written or in a multimedia format (CD/DVD). Written interviews should be in a notebook. Written reports should be 3 to 5 pages, double spaced, 12-point font, and 1" margins. Multimedia reports should be between 3 to 5 minutes in length. Scoresheet SF239

DEPARTMENT H – SET AEROSPACE (ROCKETS/DRONES)

Division 850 – Aerospace (Rockets/Drones)

Purple \$2.50, Blue \$2.50, Red \$2.00, White \$1.50

This category gives 4-H'ers a chance to display the rockets and drones they have created. Through participation in this category 4-H'ers will show judges what they learned about and how they adapted their exhibit throughout this project. Involvement in SET Aerospace gives participants a first-hand

experience in modern technology.

RULES

1. The name and county of each exhibitor should appear separately on the back of each board, poster or article and on the front cover of the notebooks so owner of the exhibit may be identified if the entry tag is separated from the exhibit.
2. Each individual is limited to one exhibit per class. All static exhibits must have received a purple ribbon at the county fair to advance to the State Fair.
3. Rockets must be supported substantially to protect the rocket from breakage. Rockets are to be mounted on a base that has dimensions equal or less than 12" x 12" and the base should be 3/4" thick. No metal bases. If the rocket fins extend beyond the edges of the required base (12" x 12"), then construct a base that is large enough to protect the fins. The base size is dictated by the size of the rocket fins.
4. The rockets must be mounted vertically. Please do not attach sideboards or backdrops, figures, legos, etc. to the displays. In addition, a used engine or length of dowel pin is to be glued and/or screwed into the board and extended up into the rocket's engine mount to give added stability.
5. Rockets must be equipped as prepared for launching with wadding and parachute or other recovery system. Rockets entered with live engines, wrong base size or sideboards will be DISQUALIFIED.
6. A report protected in clear plastic cover, must include: 1) rocket specification (include original or photo of manufactured packaging stating rocket skill level), 2) a flight record for each launching (weather, distance, flight height); 3) number of launchings; 4) flight pictures, 5) Safety (how did you choose your launch site? Document safe launch, preparations, and precautions), 6) objectives learned and 7) conclusions.
7. The flight record should describe engine used, what the rocket did in flight and recovery success. Points will not be deducted for launching, flight or recovery failures described. This includes any damage that may show on the rocket. Complete factory assembled rockets or entry level rockets, made with PLASTIC FINS and PLASTIC BODY TUBES will not be accepted at the County or State Fair.
8. Judging is based on display appearance, rocket appearance, workmanship, design or capabilities for flight, number of times launched and report. Three launches are required to earn the maximum launch points given on the score sheets. For scoring for the State Fair, only actual launches count, misfires will not count towards one of the required three launches.
 - For self-designed rockets only, please include digital record copy of one flight. In the documentation please include a description of stability testing before the rocket was flown.
 - Skill level of project is not determined by number of years in project. Skill level is determined by the level listed on the manufacturing packaging.
 - 4-H Rocket project levels are not intended to correspond to National Association of Rocketry model rocket difficulty ratings or levels.
 - The 4-H'ers name, address, county, age, and years in rocket project should appear on the bottom of the base and on the report.
 - 4-H'ers may visit with the judge on Wednesday, July 13 between 1:15 p.m. to 2:00 p.m. about their rocket.
9. High power rockets (HPR) is similar to model rocketry with differences that include the propulsion power and weight increase of the model. They use motors in ranges over "G" power and or weigh more than laws and regulations allow for unrestricted model rockets. These rockets are NOT appropriate for 4-H projects and will be disqualified.
10. Posters can be any size up to 28" by 22" when ready for display. Example: tri fold poster boards are not 28" by 22" when fully open for display.

Youth enrolled in Aerospace 2, 3, or 4 may exhibit in any class within this division.

H-850-001 Rocket: Any Skill Level Rocket with wooden fins and cardboard body tubes painted by hand or air brush. Scoresheet SF92

H-850-002 Aerospace Display: Poster or display board that displays or exemplifies one of the principles learned in the Lift Off Project. Examples include: display of rocket parts and purpose, explains the parts of a NASA rocket or shuttle, interview of someone in the aerospace field, or kite terminology. Include a notebook containing terminology (definition), and what was learned. Display can be any size up to 28" x 22". Scoresheet SF93

H-850-003 Rocket: Any Skill Level Rocket with wooden fins and cardboard body tubes painted using commercial application. Example: commercial spray paint. Scoresheet SF92