Department H

Home Environment; Electricity; Entomology; Geology; Photography; Spacetech; Forestry; Woodworking; Posters; Other Projects; Leadership

Superintendents: Department H-Janice Reiss

Assistant Superintendent: Jim Cormode

Special Awards:

The following have contributed premium money for Department H.

Bruce Low, Atchison, donates $20

Section I - Home Environment

Purple/Blue - $3.50; Red -$ 3.00; White -$ 1.75

Special Awards:

Cliff and Barbara Metcalfe, Cummings, provides a trophy for the Champion and Reserve Champion in Home Environment.

Home Environment Rules:

1. Enter projects on Monday. Judging of exhibits will be on Tuesday from 9:00 a.m. to 11:00 a.m. Judging will be scheduled by the Extension Office.
2. Open only to members enrolled in Home Environment project.
3. A member may enter only one exhibit per class. May enter class H-803 in woodworking.
4. Only articles judged may be included in the exhibit.
5. Home tour judging will be judged as scheduled on Monday of pre-fair week. Display representative of project required can be set up by Tuesday before noon.
6. An entry card must be attached to the exhibit with safety pin(s), tape or string.

H-101-Single exhibit - An article made by the 4-H member for the home. Include explanation of how it was made, cost, pictures, pat-tern, etc. Describe how it fits into the color and design scheme of the room. Explanations will be considered in the total score (curtains, draperies, accessories, etc.)

H-102-Poster/Display - demonstrating technique or project phase

H-103-Notebook- may include swatches, colors, stories, photo-graphs and project records which detail what was accomplished this year with a given indication of long-term plans.

H-104-Project display representing tour (required) (No state fair class)

H-105-Tour

Section II - Electricity

Purple/Blue -$ 1.50; Red - $1.25; White -$1.00

James Cormode, sponsors two $10 awards for exhibits showing how to use electrical energy more efficiently and/or new effective uses of electrical energy.

Leavenworth-Jefferson Rural Electric Cooperative donates $150.00

Electricity Rules:

1. For State Fair exhibits no hand dipped solder may be used on exhibit.
2. Articles that have been in use should be cleaned for exhibit.
3. A sheet of operating instructions must be furnished for any exhibit that is not self-explanatory.
4. Exhibit must be operable. If battery power is required, batteries must be furnished.
5. Any project with a complexity of size or electronics must have (a) instructions for assembly and use, and (b) equipment available at the time of judging for actual testing of the exhibit.
6. Exhibitors will be notified about judging time schedules by the Extension Office.

H-201-Motor application (i.e. toy motor construction, making motor portable)

H-202-Lighting (i.e. movable work bench, portable outdoor light, trouble light, test lamp, lamp conversion, study lamp)

H-203-Wiring (i.e. wiring dis-play board showing wire sizes and types of wire splices; cord and plug repairs, signal system, switchboard)

Section III - Entomology

Purple/Blue - $3.25; Red -$2.25; White -$ 1.25

Entomology Rules:

1. A 4-H member may exhibit in the collection and/or educational class for the phase for which they are enrolled.
2. All entries are to be placed in a Plexiglas covered, wooden box with outside measurements of 18x24x31-1/2". See specific phase for box and specimen number limitations.
3. Each exhibitor is required to identify each box by placing an identification label bearing exhibitor's name and county, and the class. 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 that it can be displayed lengthwise.
4. The number of orders, specimens (and families, where required) must be included on the exhibitor's box identification label.
5. Emphasis in judging will be placed on the overall variety of Kansas insects represented in the collection, accuracy of identification, skill and technique acquired in mounting of specimens, and overall arrangement and appearance of the collection.
6. For each collection class, two labels will be centered on the pin beneath each specimen. First (closest to the specimen) is the com-mon name label and the second label is the date/locality label.

Educational Exhibits

Educational exhibits are to be displayed in one standard size insect box and identified by use of an identification label as discussed above. It is to include the exhibitor's name, county, and class. Information on numbers and kinds of insects is not needed for education-al exhibits. Displays may consist of specialized groups of insects, or relate to any aspect of insect life. Display should be presented in a clear, concise and interesting manner.

1. Educational classes are limited to one standard box, a maximum of 150 specimens, and work performed during the current year. Title of the exhibit should be indicated inside the box.
2. Purpose of this project is to learn more about the importance, life cycles, biology, ecology, diversity, etc. of insects and related arthropods. Subject matter can be as varied as the insects themselves.

Beginning Entomology I

H-301-Collection - Display in one standard box a minimum of 50 and a maximum of 125 species representing at least 7 orders. Specimens should be grouped according to the order. Order labels should be pinned to the base of the box.

H-302-Beginning Educational Exhibit

Beginning Entomology II

H-303-Collection - Display in one standard box a minimum of 75 and a maximum of 150 species representing at least 9 orders. Follow instructions listed for all collections in rules one through six above.

H-304-Beginning Entomology II Educational Exhibit

Intermediate Entomology

H-305-Collection - Display a minimum of 100 and a maximum of 300 insects representing at least 10 orders. Check with Extension Office for more details.

H-306-Intermediate Educational Exhibit

H-307 Butterfly Project Exhibit

H-308 Butterfly Environment Display

Section IV - Geology

Purple/Blue - $1.50; Red - $1.25; White - $1.00

Geology Rules:

1. The exhibit box should be 18x24x3-1/2" with Plexiglas cover. All specimens are to be arranged across the narrow (18") dimension of the exhibit box, making the exhibit 18" across the top and 24" deep exactly. Plexiglas cover must be removable from the top. Screws, locks, or other devices that would prevent judges from re-moving Plexiglas cover should not be used.
2. Each exhibitor is required to identify each display box by placing an identification label bearing name, county, and number of specimens in the upper left-hand corner of the Plexiglas cover (inside-use clear double sided tape to adhere gummed labels), and by attaching a label with the same information on the lower right corner of the box (outside).
3. Geology specimens should be labeled with the number of the specimens, date collected, specimen name or description, locality (county) where collected.
4. Specimens should be mounted in the box by proper groups- rocks, minerals, fossils.
5. All specimens must be collected from locations in Kansas. Out of state specimens will not count in the minimum number for the class, nor will they be considered in the judging.

H-401-Display at least 15 rocks, minerals, and fossils collected during the current 4-H year. Limited to one exhibit box with Plexiglas cover. Fossils must be identified to the Phylum level.

H-402-Display at least 30 rocks, minerals, and fossils, at least 5 of each. 15 must be collected during the current 4-H year. Limited to exhibit box with Plexiglas cover. This class is open to those exhibiting either first or second time at fair. Fossils must be identified to the Phylum level.

Section V - Photography

Purple/Blue - $3.75; Red - $3.25; White -$ 2.75

Special Awards:

Dennis and Judy Smith, Muscotah, provide a picture frame for Champion 4-H Photography exhibit.
Edith Lewman, Cummings, provide a trophy for Reserve Champion 4-H Photography exhibit.
Linda Bottorff in memory of Carl & Laverne Sternsdorff, Effing-ham, provide $10 in premium money.
Ralph and Rita Madden, Effingham, provide $25

Hinton Body Shop in Atchison provides $20

Photography Rules:

1. Photo exhibits will be displayed in archival protectors and not plastic bags. This allows for greater exhibit clarity. Protectors and photo mats will be available for purchase at the Extension Office.
2. Each exhibitor will be judged by consultation. Judging times will be assigned. Judging will be from 3:00 to 7:30 pm on Thursday prior to fair. An online pre-registration process sent by the extension will allow youth to select preferred judging times.
3. Exhibitor will be allowed 8 exhibits total (this can be any combination of photos, enlargements or story)
4. Enlargements must be no larger than 8x10" and no smaller than 7x9" after trimming. Trim all white borders from enlargements before mounting. **Photos are to be mounted on an 11"(top) x 12.5"(side) white mat board** (no foam core board). Mat boards are available at the Extension Office. **Top edge of print must be 1" below the top of the mount. Sides of the photo must be an equal distance from the sides of the mount.** A permanent mount must be made using photographic dry mounting tissue, or spray adhesive.
5. No lettering is permitted on the mount or on pictures. No under-lays or borders are to be used. No contact prints on front of mount. 6. Photo story exhibits may have 3-5 prints, no smaller than 3x5" (horizontal or vertical) arranged on one white mat board 11"x12.5" tall. Trim all white borders from prints.
7. The photo album is a portfolio of the exhibitor's work done during the current year. Photos are to be categorized and each photo captioned. Portfolio should be limited to 10 pages.
8. Composite exhibit is to be mounted on an 11" (top) x 12.5" (side) mat board. The purpose of this exhibit is to demonstrate photography technique; i.e. lighting. Small prints may fill the board.
9. 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. Digital images that have had objects added or removed, multiple filter effects applied or black and white and color combined must be entered in the class for Computer Manipulated Photos. The black and white class is 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.
10. A Non-Adjustable Camera has a fixed f-stop and shutter speed. If the f-stop or shutter speed can be changed either manually or automatically, the camera is adjustable. Digital Camera A color/ black and white photo taken with a digital camera and printed with-out any more enhancement than could be done in a photo darkroom/ lab would be no different than a photo with film. Enter class 276 or 281. Computer enhanced or manipulated photos are those manipulated in the computer beyond that which could be done in the dark-room. These would be entered in class 300.
11. An exhibitor is limited to one photo (print) and one video entry. Exception: Exhibitors with 8 or more years may enter an additional photo if exhibited in a different class.
12. Digital Composite Image - photo must be created from 2 or more originals taken by the exhibitor. Exhibitor must include an explanation of what manipulation was done and the original photos in standard size print.

SEE STATE FAIR RULES FOR FURTHER RULE IF SELECT-ED FOR STATE FAIR (classes H503 or H513)
.* No State Fair Class

4-Her with 3 years or less in photography project

H-501-Color Photo
H-502-Black and White Photo
H-503-Digital Composite (see rule 12) **H-504**-Photo Story*
H-505-Photo Album*
H-506-Miscellaneous/Creative*

4-Her with 4 or more years in Photography project

H-511-Color Photo
H-512-Black and White Photo
H-513-Digital Composite (see rule 12) **H-514** - Video
H-515-Photo Story* **H-516**-Photo Album*
H-517-Miscellaneous/Creative* or theme) *

Section VI - Spacetech /Rocketry

Purple/Blue - $1.50; Red - $1.25; White - $1.00 **Special Awards**:
Premium monies provided by Spielman Fertilizer, Muscotah, $25.

Linda & John Funk sponsor a trophy for champion rocket.
Rocketry Rules:
1. Each exhibitor may enter one rocket per class made during the current year. Rocket support base limited to 8" square. Launch pads are not acceptable. Each rocket must be able to stand freely by itself or be supported on a wooden base, not to exceed 3/4x8" square. Wooden or metal support rods must not extend past the tip of the nose cone. To qualify for the state fair, the rocket must have been flown. Follow rules and safety of National Association of Rocketry.
2. The report that accompanies the rocket must be limited to the 4-H Rocket Information Form which is glued to a 10x13" envelope (copy available at the Extension Office).
3. A copy of plans must be placed inside the envelope. Photographs are also required with the exhibit. Place one 8-1/2x11" page of photographs, only one side covered, inside the envelope.
4. For original design rockets, describe in summary how model was tested for stability prior to flying.
5. Angles of the fins must fit a plus or minus two-degree variation. 6. Exhibit must be smooth and uniform.
7. Engines and igniter are not permitted with the exhibit.
8. Beginner kits with prefabricated plastic fin assemblies and prefinished rockets requiring no painting are not acceptable.

Rocket Made From a Kit (Include plans)

H-601-Exhibitors 7 through 13 years old **H-602**-Exhibitors 14 and older
Rocket Made from Original Materials (Include original plans) **H-603**-Exhibitors 7 through 13 years old
H-604-Exhibitors 14 and older

Robotics

1. 4-H member must be currently enrolled in the robotics project to exhibit and project must have been constructed and/or 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.
3. 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.
4. Robots must be powered by an electrical, battery, water, or solar source only. Robots powered by fossil fuels/flammable liquids will be disqualified. All robots must include an on/off switch for operation. No remote control devices will be allowed for state fair exhibits.
5. Each robot must be in operable working condition. The judges will operate each robot to evaluate its workmanship and its ability to complete the required tasks for this current 4-H year.
6. Each exhibitor should complete the "4-H SpaceTech Robotics Exhibit Information Form" available on Extension web site.
7. Robots that include weaponry of any kind will be disqualified.
8. Creativity, workmanship, and functionality will be strong criteria in judging the "Robot designed by Exhibitor" class.
9. Educational displays are limited to one 2' x 3' tri-fold display board and no more than 3' x 3' of table space. Care should be taken to use durable materials that will withstand fair conditions. No electricity will be provided.
10. Team project notebooks must be organized in a 3-ring binder and should highlight information/roles of each team member, drawings, charts, photographs, goals and objectives of your robotics project, and all robotic competitions your team has competed in during the current 4-H year.
H-605-Robot made from kit.
H-606-Robot designed & constructed by exhibitor. (Not modification of kit or plan)
H-607-Programmable robot made from a commercial (purchased) kit.
H-608-Educational Display or notebook
H-609-Team designed and constructed robot or display

Section VII - Forestry

Purple/Blue - $1.50; Red - $1.25; White - $0.00
Forestry Rules:
1. All leaf exhibits are to be mounted on an 8-1/2x11" heavy stock paper and placed in loose-leaf binders. (Magnetic or adhesive filler sheets for photographic prints are recommended.) Twigs and fruit collections may be exhibited in whatever manner you choose. (Maximum exhibit size 2'x3'.)
2. Name, club, age, and number of years in this project should be on front cover or in a prominent location.
3. Leaves should be identified with an appropriate label located near the leaf on the same page. These labels should include 1) the proper common name as listed in 4-H Bulletin #334, "List of Native Kansas Forest Trees"; 2) location (city and/or county) where collected; and 3) date (day, month, year) collected.
4. For ideas on mounting, see the Forestry Project booklet.
5. Divide specimens into the following two sections: Native Kansas Trees, and Non-Native Trees.
6. Junior Forester - Exhibit only in phase(s) enrolled. Knowing Trees as Individuals (Leaf Collections**)
H-701-Beginning - Exhibit leaves. Minimum of 10 different native Kansas trees, (or) leaf, twig, and fruit of 5 different native trees. Can include additional non-native specimens in addition to required native Kansas tree specimens.
H-702-Intermediate - Exhibit leaves. Minimum of 20 (Includes at least 10 new in addition to previously exhibited) different native Kansas trees, or leaf, twig and fruit of 10 different trees (includes at least five new in addition to those previously exhibited). Can exhibit non-native in addition to the required native Kansas trees. **Exhibit one complete leaf when possible. When leaf is too large, exhibit as much of the terminal portions as possible. Sketch in reduced scale the entire leaf and illustrate where the exhibited portion comes from.
How a Tree Grows
H-703-Display requires project notebook with 10 or more seeds collected with pictures showing germination study.
Tree Appreciation
H-704-Display requires project notebook of your work.

Section VIII - Woodworking

Purple/Blue - $6.25; Red - $5.25; White - $4.25
Special Awards:
In memory of Adam Reiss, Meadowlark 4-H Club provides useable awards for Overall Grand Champion and Overall Reserve Grand Champion Woodworking.
Premium Money:

Premium money in this department is sponsored by: David Royer in Memory of Willard and Ruby Royer provides $25; Mr. & Mrs. Gary Wilson, Cummings, provides $10. Spielman Fertilizer, Muscotah, provides $25.

Woodworking Rules:
1. Any 4-H member enrolled in the 4-H woodworking project may enter an exhibit. 4-Her enrolled in home environment may exhibit in class 309.
2. Entries can be entered on Monday and will be judged at 3:00 p.m
3. The plan from which exhibit was constructed must be with the article exhibited. The plan may be a photocopy, the actual pattern, or a scale drawing. If you draw your own plan, a scale of one-half inch equals one foot is suggested. Plan must be complete and accurate to the extent that a duplicate article could be built using the plan as a guide.
4. Any project with missing or insufficient plans will be lowered a ribbon placing (i.e. a blue ribbon project will receive a red ribbon)
5. The Woodworking Department will be divided into two divisions: Junior (12 and under) and Senior (13 and over).
6. An exhibitor may exhibit no more than three articles in this department and no more than 1 article per class.
H-801-Woodworking articles for farm/shop
H-802-Lawn furniture
H-803-Household furniture
H-804-Other woodwork articles not included in above classes (i.e. bird feeders, bird houses, knife racks, bread boards, doorstops, etc.
H-805-Piece of repaired or refinished furniture (woodworking or home improvement projects only.)
H-806-Any article made from a kit.
H-807-Hand tooled item only

Section IX - Posters

Premium money for all posters except Reading and Leadership: Purple/Blue - 2.25; Red - 1.75; White- 1.50
Premium Money for Reading Posters: Purple/Blue - 3.00; Red - 2.50; White - 2.25 Premium Money for Leadership Posters: Purple/Blue - 2.50; Red - 2.10; White - 1.75
Poster Rules:
1. Posters should be 22" x14".
2. Posters may be displayed in all enrolled projects.
3. Posters must be entered from 9:00 to 11:00 on Monday.
Special Awards:
In memory of Yasu Gfeller, Karl Gfeller, Huron, sponsors a trophy for the Champion citizenship poster.
H-901-Citizenship
H-902-Financial Champions
Special Awards:
In memory of Yasu Gfeller, Karl Gfeller, Huron, sponsors a trophy for the Champion leadership poster.
Hinton Body Shop, Atchison, $10 Premium Money for leadership posters.
H-903-Leadership
Special Awards:
Farmerette FCE provides $25 premium money for a poster that encourages reading.
H-904-Reading
H-905-Safety
H-906-Sports Fishing
H-907-Wildlife
H-908-Miscellaneous (Self-Determined, Bicycle, or any other projects)

Section XI - Other Projects

Purple/Blue - $1.50; Red - $1.25; White - $1.00
1.4-H member is encouraged to enter projects not included elsewhere in the fair book. Follow instructions of the project material. Contact the Extension Office for assistance and judging details.
2.Depending on project enrollment, youth may enter more than 1 entry in classes H1101, H-1105, H-1109.
H-1101-Self- Determined
H-1102-Financial Champion Notebook
H-1103-Financial Champion Display
H-1104-Sports Fishing Notebook
H-1105-Sports Fishing Display
H-1106-Wildlife Notebook
H-1107-Wildlife Display
H-1108-Wildlife Taxidermy/Tanning Exhibit - Must include photo/ detailed journal or process
H-1109-Any Other Project Exhibit/Display/Notebook

Section XII - Leadership

Special Awards:
Laura Davis, Nortonville, provides $20 premium to be divided among all exhibitors.
1. 4-Hers enrolled in Leadership may develop and carry out a leadership project plan. Following completion, create a portfolio including outline, pictures, 2 letters of reference from adult mentors and any supporting documents.
2. 4-Her will consult with judge regarding plan in August. A schedule will be sent to 4-Hers submitting a plan.
H-1201-Leadership project

Section IX - Posters

Premium money for all posters except Reading and Leadership: Purple/Blue - 2.25; Red - 1.75; White- 1.50
Premium Money for Reading Posters: Purple/Blue - 3.00; Red - 2.50; White - 2.25 Premium Money for Leadership Posters: Purple/Blue - 2.50; Red - 2.10; White - 1.75
Poster Rules:
1. Posters should be 22" x14".
2. Posters may be displayed in all enrolled projects.
3. Posters must be entered from 9:00 to 1:00 on Monday.
Special Awards:
In memory of Yasu Gfeller, Karl Gfeller, Huron, sponsors a trophy for the Champion citizenship poster.
H-901-Citizenship
H-902-Financial Champions **Special Awards:**
In memory of Yasu Gfeller, Karl Gfeller, Huron, sponsors a trophy for the Champion leadership poster.
Hinton Body Shop, Atchison, $10 Premium Money for leadership posters.
H-903-Leadership
Special Awards:
Farmerette FCE provides $25 premium money for a poster that encourages reading.
H-904-Reading
H-905-Saftey
H-906-Sports Fishing
H-907-Wildlife
H-908-Miscellaneous (Self-Determined, Bicycle, or any other project