

PLANT SCIENCE

Individuals in the Crop Production, Field Crops project may exhibit grain or plants to 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.

All static exhibits must have received a purple ribbon at the county fair to advance to the State Fair.

Scoresheets can be found at <https://go.unl.edu/ne4hagronomy>.

AGRONOMY - FIELD CROPS

Rules - Grain or Plant Exhibits (Classes 1-5)

- A completed Crop Production Worksheet (available from the extension office or at <https://cropwatch.unl.edu/Youth/Documents/Crop%20Production%20Project%20Worksheet%20Final.pdf>) must accompany grain and plant exhibits or it will automatically be deducted one ribbon placing. The 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. 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. 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.
- 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 tied 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 or half size small square bale.

CLASSES (Scoresheet SF264)

PREMIUMS: Purple, \$2.50; Blue, \$1.75; Red, \$1.40; White, \$.70

G750001 **Corn** (includes yellow, white, pop, waxy, or any other type)

G750002 **Soybeans**

G750003 **Oats**

G750004 **Wheat**

G750005 **Any other crop** (includes grain sorghum, alfalfa, millets, barley, rye, triticale, amaranth, dry beans, sugar beet, mung bean, canola, forage sorghum, safflower, etc.)

Rules - Grain or Plant Displays (Classes 6-10)

- 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
- **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.

CLASSES (Scoresheet SF259 for all classes)

- G750006 **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.
- G750007 **Crop Technology Display** - Display information about aspects of technology used in crop production, such as genetic engineering, crop breeding, GPS, yield mapping, computers, etc.
- G750008 **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.). This should not be about the process of crop production but focus on an end product(s).
- G750009 **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.
- G750010 **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.
- **G750901 **Crops Display (County Only)**

Special Agronomy Project - 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.

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.

- G750011 Special Agronomy Project - Educational Exhibit (SF259)**- Educational exhibit based on what was learned from the project. Present information on a poster 14" X 22" either vertical or horizontal arrangement or in a clear plastic report cover. The 4-H member's name, age, and county must be on the back of the poster or report cover. Refer to Scoresheet SF259. 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.
- G750012 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.
- G750013 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.

AGRONOMY - WEED SCIENCE

Rules – Weed Science

1. Any individual 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 in 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).
2. **Weed Science Books (Classes 1-2)**
 - Plants must be mounted on sheets that are no larger than 14" wide by 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.
 - Exhibits will be judged based on completeness of plant mount, accuracy of identification, label, neatness, and conformity to exhibit requirements. Refer to Scoresheet SF261.
 - Each completed mount must have the following information in the lower right hand 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.
3. **Weed Science Displays (Class 3)**
 - 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. Refer to Scoresheet SF259.
 - Each display must have a one-page essay 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.

CLASSES

PREMIUMS: Purple, \$2.50; Blue, \$1.75; Red, \$1.40; White, \$.70

- G751001 **Weed Identification Book (Scoresheet SF261)** - A collection of a minimum of 15 plant mounts including at least two of the following prohibited noxious weeds (Canada thistle, musk thistle, plumeless thistle, saltcedar, 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.
- G751002 **Life Span Book (Scoresheet SF261)** - A collection of 7 perennials, 1 biennial, and 7 annual weeds.
- G751003 **Weed Display (Scoresheet SF259)** - 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.

HORTICULTURE

The purpose of Horticulture is to encourage participants to start and maintain vegetable and herb gardens. In addition, 4-H'ers can participate in planting, growing, and caring for flowers and houseplants. There is also a Special Gardening Project in the category that 4-H'ers may participate in.

All static exhibits must have received a purple ribbon at the county fair to advance to the State Fair. Premier 4-H Science Award is available in this area. Please see General Information for more details.

Scoresheets can be found at <https://go.unl.edu/ne4hhorticulture>.

FLORICULTURE, EDUCATIONAL EXHIBITS & HOUSEPLANTS

Rules – Floriculture (Classes 1-46):

- Youth must be enrolled in the **World of Flowers and/or Annual Flowers** projects to exhibit a **maximum of FOUR (4) entries per person** in classes 1-46 (cut flowers) and 50-53 (educational exhibits). Since cut flowers are seasonal, youth may substitute and exhibit in any class, however, youth are still limited to **ONE EXHIBIT PER EXHIBIT CLASS NUMBER**. Entries must be the work of the 4-H member.
- **For Classes 1-23: Cut Flower Annuals and Biennials** – 5 stems of a single variety (cultivar) unless otherwise noted in parenthesis.
- **For Classes 30-36: Cut Flower Perennials** – 5 stems of a single variety (cultivar) unless otherwise noted in parenthesis.
- The cultivar or variety name must be included on all entries. If potted container with several cultivar or varieties identify each individually within the pot. Failure to identify the cultivar or variety will drop the entry one ribbon placing. Proper identification is the responsibility of the exhibitor.
- Exhibits entered under an incorrect class number or containing an incorrect number of stems will be dropped one ribbon placing. In classes 23, 45 & 46, do not duplicate entries from the already listed classes or entry will be dropped one ribbon placing. For example: 4-H'ers with two cultivars or varieties of marigolds can only enter the marigold class and cannot enter the other cultivar or variety in any other class.
- A **perennial** is defined as a plant of which the crown overwinters.
- An **annual** is a plant that grows from seed each season, whether self-seeded or planted by the gardener.
- A **biennial** is a plant that germinates, grows and overwinters as a crown, blooms the following year and dies.
- Foliage will be considered when exhibit is judged.
- All 3 or 5 stems of cut flowers should be the same cultivar and color, do not mix cultivars and colors. Containers will not be judged; however, they should be clear glass containers that won't tip over and of adequate size to display blooms. Any exhibit not in a clear glass container will be dropped one ribbon placing. Do not use containers that are valuable, as you may not get them back. (No plastic containers are allowed at State Fair and containers may not be returned from State Fair.)
- Follow the guidelines in 4-H "Preparing Cut Flowers for Exhibits" 4H227 (revised 2016) when preparing entries for the fair. Available at the extension office or free download at <https://extension.unl.edu/statewide/knox/4-h-horticulture-floriculture-project/>

FLORICULTURE (Scoresheet SF106)

PREMIUMS: Purple, \$1.25; Blue, \$1.00; Red, \$.75; White, \$.40

Cut Flower Annuals and Biennials (Classes 1-23) - 5 stems of a single variety (cultivar) unless otherwise noted in parenthesis.

G770001	Aster	G770015	Pansy
G770002	Bachelor Buttons	G770016	Petunia
G770003	Bells of Ireland	G770017	Salvia
G770004	Browallia	G770018	Snapdragon
G770005	Calendula	G770019	Statice
G770006	Celosia (crested or plume) (3 stems)	G770020	Sunflower (under 3" diameter - 5 stems, 3" or more in diameter - 3 stems)
G770007	Cosmos		
G770008	Dahlia	G770021	Vinca
G770009	Dianthus	G770022	Zinnia
G770010	Foxglove	G770023	Any other annual or biennial
G770011	Gladiolus (3 stems)		(Under 3" diameter-5 stems, 3" or more in diameter-3 stems) (do not duplicate entries in classes 1-22)
G770012	Gomphrena		
G770013	Hollyhock (3 stems)		
G770014	Marigold		

Cut Flower Perennials (Classes 30-46) - 5 stems of a single variety (cultivar) unless otherwise noted in parenthesis.

G770030	Achillea/Yarrow
G770031	Chrysanthemum
G770032	Coneflower
G770033	Coreopsis
G770034	Daisy
G770035	Gaillardia
G770036	Helianthus
G770037	Hydrangea (3 stems)
G770038	Liatris (3 stems)
G770039	Lilies (3 stems) Not Daylilies
G770040	Platycodon
G770041	Rose (3 stems)
G770042	Rudbeckia/Black-eyed Susan
G770043	Sedum
G770044	Statice
G770045	Any other perennial (under 3" diameter-5 stems, 3" or more in diameter-3 stems) (do not duplicate entries in classes 30-44)

PREMIUM: Purple, \$3.50; Blue, \$2.75; Red, \$1.80, White, \$.90

G770046 **4-H Flower Garden Collection of 5 different cut flowers (Scoresheet SF106)**
Flowers are to be cut not potted. Each flower in the collection should be exhibited with the number specified for classes 1-45. Display in a box or other holder not more than 18" in any dimension. Do not duplicate entries in classes 1-45 with any in the group collection. Boxes may not be returned from State Fair.

G770901 **Hanging Basket
G770902 **County Only Floriculture Exhibit

EDUCATIONAL EXHIBITS (Classes 50-53)

PREMIUMS: Purple, \$1.75; Blue, \$1.35; Red, \$1.00; White, \$.60

G770050 **Flower Notebook (Scoresheet SF100)**
Exhibit a notebook containing pictures of flowers grown in Nebraska. There must be at least 10 different species of annuals and/or biennials and 10 different species of perennials hardy to Nebraska. Bulbs may be included in a separate section. 4-H'ers may show more than one cultivar of the same species, but they will only count as one species. The notebook must be the result of the current year's work. Pictures from garden catalogs, hand drawn pictures, or photographs may be used. Each species/cultivar must be labeled with the correct common name and scientific name; the height and spread of the plant and the growing conditions (for example: needs full sun and dry sandy soil) the species prefers. In addition to this information, bulbs should also be labeled as spring or summer flowering. Give proper credit

by listing the sources of pictures and information used. The 4-H member's name, age, county, and years in the project(s), must be on the back of the notebook.

G770051

Flower Garden Promotion Poster (Scoresheet SF103)

Individual poster promoting flower gardening, size 14" x 22" either vertical or horizontal arrangement. Poster may be in any medium: watercolor, ink, crayon, etc. as long as it is not 3-dimensional. Posters using copyrighted material will not be accepted. The 4-H member's name, age, county and years in the project(s) must be on the back of the poster.

G770052

Educational Flower Garden Poster (Scoresheet SF104)

Prepare a poster 14" x 22" x 2" (3-dimensional if needed) either vertical or horizontal arrangement illustrating a skill or project you have done or learned about in a 4-H flower or houseplant project. One might show a special technique used or equipment incorporated in your garden. Refer to 4-H horticulture project manuals but use your own creativity. The 4-H member's name, age, county and years in the project(s) must be on the back of the poster.

G770053

Flower Gardening History Interview (Scoresheet SF105)

Neatly handwritten or typed account of a gardening history interview whose flower garden has inspired you. Maximum of 4 pages of text and 2 pages of pictures (include 1 picture of the person you interviewed) of their flower garden if the individual is still gardening. Protect with a clear report cover. The 4-H member's name, age, county and years in the project(s) must be on the back of the report cover.

HOUSEPLANTS (Classes 60-66):

Youth must be enrolled in the **Growing Great Houseplants** project to exhibit in classes 50-66. Youth may enter a maximum of THREE (3) entries in classes 50-53 (educational exhibits) and classes 50-66 (houseplants), but each entry must have received a purple ribbon at the county fair to advance to State Fair.

Container Grown Houseplants: The choice of container and soil quality will be considered in judging. Each houseplant must be identified by listing the names on a card attached to the container. Identify each plant individually if more than one cultivar or variety. Houseplants should be grown in the display container for a minimum of six weeks. **Plants grown as houseplants must be used.** These two NebGuides include a listing of common houseplants:

NebGuide G2205 "Guide to Growing Houseplants" <http://extensionpublications.unl.edu/assets/html/g2205/build/g2205.htm>

NebGuide G837 "Guide to Selecting Houseplants" <http://extensionpublications.unl.edu/assets/html/g837/build/g837.htm>

Containers of annual flowers or annual plants (petunias, geraniums, impatiens) will be disqualified and will not be judged.

Entries in Classes 60-66 must have been designed and planted by the 4-H member. Container grown houseplants shall be in pots no greater than 12" in diameter (inside opening measurement). Dish gardens, fairy or miniature gardens, desert gardens, and terrariums may be up to 12" in diameter (inside opening measurement). **Any container grown plant in Classes 60-66 that is greater than 12" in diameter (inside opening measurement) will be dropped one ribbon placing.** In classes 60-65, exhibitors must have and provide a saucer to catch drainage water. The 4-H member's name, age, county and years in the project(s) must be on the bottom or back of the container and saucer.

HOUSEPLANTS, CLASSES (Scoresheet SF107)

PREMIUMS: Purple, \$2.50; Blue, \$1.75; Red, \$1.40; White, \$.70

G770060

Flowering Potted Houseplants(s) that are blooming for exhibition. Container may have one or more houseplants in container. Label with name for each plant. Non-blooming plants will be disqualified.

G770061

Foliage Potted Houseplant one variety of tropical or cacti or succulent plant. Label with name of plant.

G770062

Hanging Basket of flowering and/or foliage houseplants. Container may have one or more houseplants in container. Label with name for each plant.

G770063

Dish Garden - an open/shallow container featuring a variety of houseplants excluding cacti and succulents. Label with name for each plant.

G770064

Fairy or Miniature Garden – A miniature "scene" contained in an open container and featuring miniature or small, slow growing houseplants. The garden needs to have an imaginative theme and miniature accessories, i.e., bench, fence made from tiny twigs, small shell for a bathtub, etc. Label with name for each plant.

- **G770903 **County Only Fairy Garden** – A Fairy Garden that is NOT eligible for State Fair. Label with name for each plant.
- G770065 **Desert Garden** - an open/shallow container featuring cacti and/or succulents grown as houseplants. Label with name for each plant.
- G770066 **Terrarium** - a transparent container, partially or completely enclosed; sealed or unsealed. Label with name for each plant.
- **G770902 **County Only Plant** – Label with name for each plant.

VEGETABLES, HERBS, FRUITS, & EDUCATIONAL EXHIBITS

Youth must be enrolled in the Everyone A Gardener project and/or Gardening Unit1-Unit4 projects to exhibit. An exhibitor may enter a **maximum of TEN (10) entries** per person in classes 201-286 (vegetables, herbs, fruits) and 290-294 (educational exhibits). Since vegetables, herbs, and fruits are seasonal, youth may substitute and exhibit in any class, however, youth are still limited to 10 exhibits. **Exhibits are limited to ONE EXHIBIT PER EXHIBIT CLASS NUMBER. Entries must be the work of the 4-H member.**

Notebooks and posters must have received a purple ribbon at the county fair to advance to the State Fair.

The cultivar or variety name must be included on all entries. Failure to identify the cultivar or variety will drop the entry one ribbon placing. Proper identification is the responsibility of the exhibitor. Exhibits entered under an incorrect class number or containing an incorrect number of vegetables will be dropped one ribbon placing. In classes 252, 255, 268, 269, 285, and 286 do not duplicate entries from any of the other classes or entry will be dropped one ribbon placing. For example: 4-H'ers with two cultivars or varieties of red tomatoes can only enter the red tomatoes class and cannot enter the other cultivar or variety in any other vegetable class. Follow the guidelines in "Selecting and Preparing Vegetables, Herbs, and Fruits for Exhibit" 4H226 when preparing entries for the fair. Available at the extension office or free download at <http://4h.unl.edu/4hcurriculum/preparingvegetabeshersandfruit>

VEGETABLES - Classes 1-56 (Scoresheet SF108)

PREMIUMS: Purple, \$1.25; Blue, \$1.00; Red, \$.75; White, \$.40

<u>Class</u>	<u>Vegetable followed by Number to Exhibit</u>		
G773201	Lima Beans (12)	G773229	Pumpkin (2)
G773202	Snap Beans (12)	G773230	Miniature Pumpkins-Jack Be Little (5)
G773203	Wax Beans (12)	G773231	Radish (5)
G773204	Beets (5)	G773232	Rhubarb (5)
G773205	Broccoli (2)	G773233	Rutabaga (2)
G773206	Brussels Sprouts (12)	G773234	Green Summer Squash (2)
G773207	Green Cabbage (2)	G773235	Yellow Summer Squash (2)
G773208	Red Cabbage (2)	G773236	White Summer Squash (2)
G773209	Carrots (5)	G773237	Acorn Squash (2)
G773210	Cauliflower (2)	G773238	Butternut Squash (2)
G773211	Slicing Cucumbers (2)	G773239	Buttercup Squash (2)
G773212	Pickling Cucumbers (5)	G773240	Other Winter Squash (2)
G773213	Eggplant (2)	G773241	Sweet Corn (in husks) (5)
G773214	Kohlrabi (5)	G773242	Swiss Chard (5)
G773215	Muskmelon/Cantaloupe (2)	G773243	Red Tomatoes (2" or more in diameter) (5)
G773216	Okra (5)	G773244	Roma or Sauce-type Tomatoes (5)
G773217	Yellow Onions (5)	G773245	Salad Tomatoes (under 2"diameter) (12)
G773218	Red Onions (5)	G773246	Yellow Tomatoes (2" or more diameter) (5)
G773219	White Onions (5)	G773247	Turnips (5)
G773220	Parsnips (5)	G773248	Watermelon (2)
G773221	Bell Peppers (5)	G773249	Dry Edible Beans (1 pint)
G773222	Sweet (Non-Bell) Peppers (5)	G773250	Gourds, mixed types (5)
G773223	Jalapeño Peppers (5)	G773251	Gourds, single variety (5)
G773224	Hot (Non-Jalapeno) Peppers (5)	G773252	Any other vegetable that doesn't fit in any other class (do not duplicate entries in classes 201-251) 2, 5, or 12
G773225	White Potatoes (5)	**G773901	County Only Special Vegetable 2, 5, or 12
G773226	Red Potatoes (5)		
G773227	Russet Potatoes (5)		
G773228	Other Potatoes (5)		

PREMIUMS: Purple, \$3.50; Blue, \$2.75; Red, \$1.80, White, \$.90

G773255 **4-H Vegetable Garden Collection of Five Kinds of Vegetables (Scoresheet SF108)**
Display Garden Collection in a box not more than 24" in any dimension. Showmanship will be considered in judging, but plastic grass, cotton, figurines, etc. should not be used in exhibit boxes. Each vegetable in the collection should be exhibited with the number specified for individual class (201-252). Do not duplicate entries in classes 201-252 with any in the group collection.

G773256 **4-H Cultivar Vegetable Collection (Scoresheet SF108)**
Vegetables entered in the collection are 5 cultivars from a single exhibit; for example, 5 cultivars of all types of peppers or squash or onions or tomatoes, etc. Display in a box not more than 24" in any dimension. Showmanship will be considered in judging; but plastic grass, cotton figurines, etc. should not be used in exhibit boxes. Each vegetable in the collection should be exhibited with the number specified for individual class (201-252).

HERBS - Classes 60-69 (Scoresheet SF108)

Herbs will be judged using the same general criteria used for vegetables. Those grown mainly for their seed, such as dill and caraway, should be exhibited on a plate. Those grown for their leaves such as basil, parsley, etc. should be exhibited in a clear glass container of water. Potted herb plants will be disqualified and will not be judged. Containers may not be returned from State Fair.

PREMIUMS: Purple, \$1.25; Blue, \$1.00; Red, \$.75; White, \$.40

G773260 **Basil** 5
G773261 **Dill (dry)** 5
G773262 **Garlic (bulbs)** 5
G773263 **Mint** 5
G773264 **Oregano** 5
G773265 **Parsley** 5
G773266 **Sage** 5
G773267 **Thyme** 5
G773268 **Any other herb** 5 (do not duplicate entries in classes 260-267)

PREMIUMS: Purple, \$3.50; Blue, \$2.75; Red, \$1.80, White, \$.90

G773269 **4-H Herb Garden Display of 5 Different Cut Herbs (Scoresheet SF108)**
Herbs are to be cut not potted. Displayed in a box or other holder not more than 18" in any dimension. Each herb in the collection should be exhibited with the number specified for classes 260-268. Do not duplicate entries in classes 260-268 with any in the group collection.

FRUITS – Classes 80-86 (Scoresheet SF108)

Fruits will be judged using the same general criteria used for vegetables. Fruit will be judged for the stage of maturity normal for that season and growing location. Emphasis will be placed on how well fruit approaches market quality.

PREMIUMS: Purple, \$1.25; Blue, \$1.00; Red, \$.75; White, \$.40

G773280 **Strawberries (everbearers)** 1 pint
G773281 **Grapes** 2 bunches
G773282 **Apples** 5
G773283 **Pears** 5
G773284 **Wild Plums** 1 pint
G773285 **Other small fruit or berries** 1 pint (do not duplicate entries in classes 280-284)
G773286 **Other fruits OR nuts** 5 (do not duplicate entries in classes 280-284)

EDUCATIONAL EXHIBITS

PREMIUMS: Purple, \$1.75; Blue, \$1.35; Red, \$1.00; White, \$.60

G773290 **Garden Promotion Poster (Scoresheet SF103)**
Individual poster promoting vegetable or herb gardening, size 14" x 22" either vertical or horizontal arrangement. Poster may be in any medium so long as it is not 3-dimensional. Posters using copyrighted material will not be accepted. The 4-H member's name, age, county and years in the project(s) must be on the back of the poster.

- G773291 **Educational Vegetable or Herb Garden Poster (Scoresheet SF104)**
Prepare a poster 14" x 22" x 2" (3-dimensional if needed) either vertical or horizontal arrangement illustrating a skill or project the 4-H'er has done or learned about in a 4-H vegetable gardening project. One might show a special technique used or equipment incorporated in the garden (e.g., drip irrigation system, composting, or special techniques learned). Refer to 4-H horticulture project manuals but use your own creativity. The 4-H member's name, age, county and years in the project(s) must be on the back of the poster.
- G773292 **Vegetable and/or Herb Gardening History Interview (Scoresheet SF105)**
Neatly handwritten or typed account of a gardening history interview of someone whose vegetable or herb garden has inspired you. Maximum of 4 pages of text and 2 pages of pictures (include 1 picture of the person you interviewed) of their garden if the individual is still gardening. Protect with a clear report cover. The 4-H member's name, age, county and years in the project(s) must be on the back of the report cover.
- G773293 **Vegetable Seed Display (Scoresheet SF101)**
Each display must include seeds representing the following families: Cucurbit, Brassica (cabbage), Solanaceous (nightshade), and Legume (pea) families plus representatives from 5 other families. Group the seeds by family and type. Glue seeds or otherwise fasten clear containers of seeds to a board or poster mat board no larger than 22" x 24". Label each group and each individual vegetable type with the common and scientific names. Use only one variety or cultivar of each vegetable, except for beans where several examples of beans may be shown. Attach a card to the back of the display explaining why and how it is important to know which vegetables are related and cite references on where the scientific name information was found. The 4-H member's name, age, county, and years in the project(s) must be on the back of the display. Information on vegetable family members can be obtained from your Extension office.
- G773294 **World of Vegetables Notebook (Scoresheet SF102)**
Choose a favorite foreign cuisine and learn what vegetables and/or herbs are common to it (e.g., Mexican, African, Chinese, Italian, etc.). Include a report telling about a minimum of 5 vegetables and/or herbs from each country chosen. Include the scientific and common names; pictures of the plants from your garden or seed catalogs; tell how they are grown; and how the foods are used. Also list a source for buying the seed or plants. Favorite recipes using some or all of the vegetables described may be included. Give proper credit by listing the source of pictures and information used. Protect in a clear report cover or 3-ring notebook. The 4-H member's name, age, county and years in the project(s) must be on the back of the report cover or notebook.
- **G773902 **County Only Horticulture Exhibit**

SPECIAL GARDENING PROJECT

The 2023 Special Garden Project is focused on Mrs. Burn's Lemon Basil.

- G775001 **Special Garden Project (Scoresheet SF109)**
Educational exhibit based on what was learned from the project. Present information on a poster 14" x 22" either vertical or horizontal arrangement or in a clear plastic report cover. The 4-H member's name, age, and county must be on the back of the poster or report cover.
- G775002 **Special Gardening Project Fresh Cut Flowers, Herbs, or Harvested Vegetables (Scoresheet SF109)**
The current year's Special Gardening project fresh cut flowers or harvested vegetables should be entered in this class. Refer to classes 1-45 for quantity to exhibit if Special Gardening Project is a fresh cut flower (SF106). Refer to classes 201-252 for quantity to exhibit if Special Gardening Project is a vegetable (SF108). Flowers and herbs must be cut not potted.

LANDSCAPE: GROW A BEAUTIFUL SPACE

The *Grow a Beautiful Space* series is designed to teach youth how to recognize and create beautiful and functional landscapes. In addition to landscape design, youth will discover career opportunities related to the discovery, use, and management of plants. Each unit includes an interactive youth manual and a leader's guide. *Grow a Beautiful Space Unit I* and *Unit II* also include a separate portfolio for youth to store notes,

photographs, and sketches. In *Grow a Beautiful Space Unit III*, youth will create their own portfolio to store their landscape drawings.

PREMIUMS: Purple, \$1.75; Blue, \$1.35; Red, \$1.00; White, \$.60 (**Denotes NOT State Fair Eligible)

- **G777901 Grow a Beautiful Space Unit 1 Portfolio Notebook (Scoresheet CF110)**
Create and complete 'Landscape Professionals & Design Principles' Unit 1 Portfolio, 4H6110P. Present portfolio information in a three-ring binder. Give proper credit by listing the sources of photographs/images and information used. The 4-H member's name, age, county, and years in the project(s) must be on the back of the notebook.
- **G777902 Establish Landscape Analysis Poster (Scoresheet CF110)**
Take multiple photographs of a landscape that has been established for 10 or more years. Critique the landscape based on each of the design principles (order, unity, rhythm, balance, scale or proportion, and emphasis). Describe the spatial definition of the landscape and what different areas of the landscape "feel like". Include photos taken to support your critique. Describe what changes need to be made in the landscape to improve its characteristics and sense of space. Display on a poster mat board no larger than 22" x 28". The 4-H member's name, age, county, and years in the project(s) must be on the back of the poster.
- **G777903 Grow a Beautiful Space Unit 2 Portfolio Notebook (Scoresheet CF111)**
Create and complete 'Landscape Plants & Materials' Unit 2 Portfolio, 4H6120P. Present portfolio information in a three-ring binder. Give proper credit by listing the sources of photographs/images and information used. The 4-H member's name, age, county, and years in the project(s) must be on the back of the notebook.
- **G777904 Landscape Renovation Poster (Scoresheet CF111)**
Take multiple photographs of a landscape that doesn't quite look right because it doesn't reflect sound design principles. Select a landscape in which you can make at least three design recommendations. Identify how the design principles (order, unity, rhythm, balance, scale or proportion, and emphasis) could be better integrated into the landscape, and how plants or materials with specific features (size, form, color, or texture) could improve the space. Reduce the opacity of the images to 50-60 percent and sketch plants, structures, materials, and/or amenities that could improve the overall design over the original images. The poster should include the original image(s) and improved image(s), and include a short explanation of how the landscape design was improved. Display on a poster mat board no larger than 22" x 28". The 4-H member's name, age, county, and years in the project(s) must be on the back of the poster.
- **G777905 Estimating Dreams Poster (Scoresheet CF111)**
Select a dream landscape as if money is not a consideration. Develop a plan drawing of the landscape. Draw landscape to scale. Identify the types of plants, structures, and amenities used in the landscape. Research the cost of the plants and amenities and the installation. Include the general cost of grading (if needed) and labor that could be associated with installation. Create a list, noting the plants that are included in the space. The quantities of plants and the structures, materials, or amenities and their cost should be included. Calculate the final total estimate. The poster should include the scale drawing of the landscape, identification of plants, structures and amenities, and cost and labor. Display on a poster mat board no larger than 22" x 28". The 4-H member's name, age, county, and years in the project(s) must be on the back of the poster.
- **G777906 Site Inventory & Analysis Poster (Scoresheet CF111)**
Make an unscaled drawing of the landscape you inventoried and analyzed. Develop two drawings: a site inventory and a site analysis. The site inventory and site analysis should be communicated through a combination of written notes, graphics symbols and photographs. Display on a poster mat board no larger than 22" x 28". The 4-H member's name, age, county, and years in the project(s) must be on the back of the poster.
- **G777907 Community Landscape Poster (Scoresheet CF111)**
Identify a local community space (park, nursing home, school, county fairgrounds, etc.) that needs some landscape improvements. Work through the design process and develop a detailed plan of your improvements to the space. The plan should include design principles, functional and aesthetic factors, list of plants and materials and their costs, budget for materials, labor you have available for the project, and a timeline. Take photographs of the area and draw over the photos to illustrate your final ideas. Include photographs of the finished landscape if project ideas were carried out. Display on a poster mat board no larger

than 22" x 28". The 4-H member's name, age, county, and years in the project(s) must be on the back of the poster.

**G777908

Renovate The Outdoors Portfolio (Scoresheet CF111)

Select a space that you would like to redesign. The space can be at your home, a family member's or friend's house, or somewhere in your community. Develop a scaled base map of the site and locate the existing plants and structures in the landscape. Take photographs of the landscape. Evaluate the physical properties of the site and conduct an interview with the people who live there or use the space. Think about how you would change the space and develop a plan that would implement design elements into the space. Create different drawings that will move you through the design process. You will draw concept diagrams, form compositions, preliminary drawings, and the final design. Once the final design drawing is complete, use overlays on the original photographs to show how the landscape will look compared to how it looked in the photo you originally took of the landscape. Place photographs, interview notes, concept and program statements and drawings in a portfolio. The 4-H member's name, age, county, and years in the project(s) must be on the back of the portfolio.

SCIENCE, ENGINEERING, and TECHNOLOGY (SET)

AEROSPACE (Rockets/Drones)

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. **Rocket Mounting** - 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.
3. The rockets must be mounted vertically. Please do not attach sideboards or backdrops 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 rockets engine mount to give added stability.
4. 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.
5. **Report** - A report, protected in clear plastic cover, must include: 1) rocket specification (include original or photo of manufacture packaging stating rocket skill level), 2) a flight record for each launching (weather, distance, and 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.
6. 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.
7. Complete factory assembled rockets will not be accepted.
8. **Judging** is based upon 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, only actual launches count, misfires will not count towards one of the required three launches.
 - a. For self-designed rockets only, please include digital recorded copy of one flight. In the documentation, please include a description of stability testing before the rocket was flown.
 - b. **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.**
 - c. 4-H Rocket project levels are not intended to correspond to National Association of Rocketry model rocket difficulty ratings or levels.