

Scientific name (in italics or underlined) with authority

Common name

County of collection

Collection date

Collector's name

Collection number

Other information depending on class selected (i.e. grazing response, longevity, season of growth, etc.)

DEPARTMENT D		DIVISION 330			RANGE MANAGEMENT
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00	
CLASS 1	Value and Importance for Livestock Forage and Wildlife Habitat and Food – A collection of 12 different plants with 4 classified as high value, 4 as medium value, and 4 as low value for livestock forage, wildlife habitat, or wildlife food. 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, and Wildlife Food.				
CLASS 2	Life Span Book – A collection of 6 perennial plants and 6 annual plants selected from grasses or forbs.				
CLASS 3	Growth Season Book – A collection of 6 cool-season grasses and 6 warm-season grasses.				
CLASS 4	Origin Book – A collection of 6 native range grasses and 6 introduced grasses. Introduced grasses are not from North America and often used to seed pastures.				
CLASS 5	Major Types of Range Plants Book – A collection of 3 grasses, 3 forbs, 3 grass-like, and 3 shrubs.				
CLASS 6	Range Plant Collection Book – A collection of 12 range plant mounts with something in common (i.e. poisonous to cattle, historically used as food by Native Americans, dye plants, 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.				
CLASS 7	Parts of a Range Plant Poster – Mount a range plant to a poster board. Label all the plant parts. Include the plant label in the lower right corner.				
CLASS 8	Range Plant Board – Will include 25 range forage species important to a particular county. The display board should be hinged in the middle. Each completed mount must have the following information typed or printed neatly: Scientific name (in italics or underlined) with authority Common name County of collection Collection date Collector's name Personal collection number, indicating the order that plants were collected in your personal collection Other information as needed				
CLASS 9	Special Study Exhibit – A display of the results of a clipping study, a degree of use study, or a range site study. The boards in this class should be 30" x 36" or if hinged in the middle, may be 60" x 36". The display should be adequately labeled.				
CLASS 10	Junior Rancher Exhibit – The exhibit should include a ranch map with a record book or an appropriate educational display on some phase of rangeland or livestock.				

HORTICULTURE

GENERAL RULES – HORTICULTURE

- GENERAL RULES** – See GENERAL RULES
- TOP EXHIBITS** – A top exhibit will be selected from those exhibits receiving purple ribbons in the Floriculture; Vegetable, Herbs & Fruits projects; and Grow a Beautiful Space projects
- MANUALS** – Printed materials are available from the Johnson County Extension Office for all currently enrolled 4-H members in Johnson County.

FLORICULTURE RULES

- GENERAL RULES** – See GENERAL RULES – HORTICULTURE EXHIBITS
- ENTRY ELIGIBILITY** - Youth must be enrolled in the World of Flowers and/or Annual Flowers projects to exhibit in classes 1-46 (cut flowers) and 50-53 (notebooks and posters). Youth must be enrolled in the Growing Great Houseplants project to exhibit in classes 60-65 (container grown plants).
- ENTRY LIMITS** - Youth may enter a maximum of 4 entries in classes 1-53. Youth may enter a maximum of 3 entries in classes 60-65.
- PREPARING ENTRIES** - Follow the guidelines in 4-H "Preparing Cut Flowers for Exhibits" 4H227 (revised 7/20/12) (Available at: <https://johnsoncounty4h.org/static-exhibit-resources/>) when preparing entries for the fair.
- CULTIVARS** - **The cultivar or variety name must be included on all entry cards.** Failure to identify the cultivar or variety will drop the entry one ribbon placing. Keep your seed package or identification label at planting time. Proper identification is the responsibility of the exhibitor not the Extension Staff or Office personnel.
- ENTRY TAGS** - For Floriculture, punch hole in the top center of entry tag and use a rubber band to securely attach entry tag to containers.
- CLASSIFICATION** - Exhibits entered under an incorrect class number or containing an incorrect number of flowers will be dropped one ribbon placing. 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.
- CUT FLOWERS** - 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 glass containers of a neutral color that won't tip over and of adequate size to display blooms. Containers will not be returned from State Fair.

DEPARTMENT G		DIVISION 770		ANNUALS & BIENNIALS
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00

*5 stems of a single variety (cultivar) unless noted in parenthesis.

CLASS 1	Aster	CLASS 13	Hollyhock (3 stems)
CLASS 2	Bachelor Buttons	CLASS 14	Marigold
CLASS 3	Bells of Ireland	CLASS 15	Pansy
CLASS 4	Browallia	CLASS 16	Petunia
CLASS 5	Calendula	CLASS 17	Salvia
CLASS 6	Celosia (crested or plumed – 3 stems)	CLASS 18	Snapdragon
CLASS 7	Cosmos	CLASS 19	Statice

CLASS 8	Dahlia	CLASS 20	Sunflower (under 3" in diameter – 5 stems; 3" or more in diameter – 3 stems)
CLASS 9	Dianthus	CLASS 21	Vinca
CLASS 10	Foxglove	CLASS 22	Zinnia
CLASS 11	Gladiolus (3 stems)	CLASS 23	Any other annual or biennial (under 3" in diameter – 5 stems; 3" or more in diameter – 3 stems) (DO NOT duplicate entries in classes 1-22)
CLASS 12	Gomphrena		

DEPARTMENT G		DIVISION 770		PERENNIALS
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00
<i>*5 stems of a single variety (cultivar) unless noted in parenthesis.</i>				
CLASS 30	Achillea/Yarrow	CLASS 38	Liatris (3 stems)	
CLASS 31	Chrysanthemum	CLASS 39	Lilies (3 stems, NOT Daylilies)	
CLASS 32	Coneflower	CLASS 40	Platycodon	
CLASS 33	Coreopsis	CLASS 41	Rose (3 stems)	
CLASS 34	Daisy	CLASS 42	Rudbeckia/Black-eyed Susan	
CLASS 35	Gaillardia	CLASS 43	Sedum	
CLASS 36	Helianthus	CLASS 44	Statice	
CLASS 37	Hydrangea (2 stems)	CLASS 45	Any other perennial (under 3" in diameter – 5 stems; 3" or more in diameter – 3 stems) (DO NOT duplicate entries in classes 30-44)	

DEPARTMENT G		DIVISION 770		GARDEN COLLECTION
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00
CLASS 46	4-H Flower Garden Collection of 5 Different Flowers – Display in a box or other holder not more than 18" in any dimension. (Boxes will not be returned from State Fair.) Each flower in the collection should be exhibited with the number specified for classes 1-45. Do not duplicate entries in classes 1-45 with any in the group collection.			

DEPARTMENT G		DIVISION 770		NOTEBOOKS & POSTERS
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00
CLASS 50	Flower Notebook - Exhibit a notebook containing pictures of flowers. There must be at least 10 different species of annuals and/or biennials and 10 different species of perennials. The notebook must be the result of the current year's work. 4-H'ers may show more than one cultivar of the same species, but they will only count as one species. Pictures from garden catalogs, hand drawn pictures or photographs may be used. Each 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; bulbs may be included in a separate section and in addition to the above information, bulbs should also be labeled as spring or summer flowering. The 4-H member's name, age, full address, county and years in the project(s) must be on the back of the notebook.			
CLASS 51	Flower Garden Promotion Poster - 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. Entry card must be stapled to the upper righthand corner. The 4-H member's name, age, full address, county and years in the project(s) must be on the back of the poster.			
CLASS 52	Educational Flower Garden Poster - Prepare a poster no larger than 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 flowers or houseplant project. One might show a special technique used or equipment incorporated in the garden. Refer to 4-H horticulture project manuals but use your own creativity. Entry card must be stapled to the upper righthand corner. The 4-H member's name, age, full address, county and years in the project(s) must be on the back of the poster			
CLASS 53	Flower Gardening History Interview - 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 or small 3-ring notebook. The 4-H member's name, age, full address, county and years in the project(s) must be on the back of the report.			

CONTAINER GROWN PLANT RULES

- GENERAL RULES** – See GENERAL RULES – HORTICULTURE EXHIBITS
- ENTRY ELIGIBILITY** - Youth must be enrolled in the Growing Great Houseplants project to exhibit in classes 60-65.
- JUDGING CRITERIA** - The choice of container and soil quality will be considered in judging. Plants should be grown in the display container for a minimum of six weeks. Entries in Classes 63-65 must have been designed and planted by the 4-H member.
- IDENTIFICATION** - Each plant must be identified by listing the names on the entry tag or on a card attached to the container.
- SIZE LIMITS** - Container grown plants shall be in pots no greater than 12" in diameter and weigh no more than 10 pounds. Dish and desert gardens may be up to 12" in diameter but not more than 10 pounds. Terrariums may not weigh over 10 pounds. Any container grown plant in Classes 60-65 that exceeds the size limits will be lowered one ribbon placing.
- OTHER REQUIREMENTS** - For classes 60-64, exhibitors must provide a saucer to catch drainage water. The 4-H members name, age, full address, county and years in the project(s) must be on the bottom or back of the container and saucer.

DEPARTMENT G		DIVISION 770		CONTAINER GROWN PLANTS
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00
CLASS 60	Flowering Potted Plants(s) - Must be blooming for exhibition (Non-blooming plants will be disqualified)			
CLASS 61	Foliage Potted Plant(s) – Must be of all the same variety			
CLASS 62	Hanging Basket (of flowering and/or foliage plants)			
CLASS 63	Dish Garden – an open container featuring a variety of plants excluding cacti and succulents			
CLASS 64	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 bath tub, etc.)			
CLASS 65	Desert Garden – An open/shallow container featuring cacti and/or succulents grown as houseplants.			
CLASS 66	Terrarium – A transparent container, partially or completely enclosed; sealed or unsealed			
CLASS 901	Other Container Grown Plants			
CLASS 902	Original Flower Arrangement - An original arrangement made with flowers from your gardening project NO PURCHASED FLOWERS ACCEPTED. Should not be larger than 12"x 12"			
CLASS 903	Original Arrangement of Natural Materials - An original arrangement made with a combination of native grasses, flowers, vines or other natural materials, should not be larger than 18" x 18"			

CLASS 904 Original Arrangement with a Combination of Materials - An original arrangement made with a combination of materials such as vegetables, fruits, herbs, and flowers from your gardening project or native materials, etc. **NO PURCHASED FLOWERS** ACCEPTED, should not be larger than 18" x 18"

VEGETABLES, HERBS & FRUITS GENERAL RULES

- 1. GENERAL RULES** – See GENERAL RULES – HORTICULTURE EXHIBITS
- 2. ENTRY ELIGIBILITY** - Youth must be enrolled in the Everyone a Gardener and/or Gardening Unit 1-4 to exhibit in classes 201-294 and 901-904.
- 3. ENTRY LIMITS** - Youth may enter a maximum of 4 entries in classes 201-294
- 4. PREPARING ENTRIES** - Follow the guidelines in "Selecting and Preparing Vegetables, Herbs and Fruits for Exhibit" 4H226 (revised June 2013) (Available at: <https://johnsoncounty4h.org/static-exhibit-resources/>) when preparing entries for the fair.
- 5. CULTIVARS** - The cultivar or variety name must be included on all entry cards. Failure to identify the cultivar or variety will drop the entry one ribbon placing. Keep your seed package or identification label at planting time. Proper identification is the responsibility of the exhibitor not the Extension Staff or Office personnel.
- 6. CLASSIFICATION** - Exhibits entered under an incorrect class number or containing an incorrect number of flowers will be dropped one ribbon placing.
- 7. COLLECTION OF FIVE** – Vegetables or herbs entered in the collection of 5 cannot be the same cultivar as those entered in the single exhibits.

DEPARTMENT G PREMIUM	DIVISION 773				VEGETABLES Number to Exhibit
	Purple \$2.50	Blue \$2.00 Number to Exhibit	Red \$1.50	White \$1.00	
CLASS 201	Lima Beans	12	CLASS 229	Pumpkin	2
CLASS 202	Snap Beans	12	CLASS 230	Miniature Pumpkin	5
CLASS 203	Wax Beans	12	CLASS 231	Radish	5
CLASS 204	Beets	5	CLASS 232	Rhubarb	5
CLASS 205	Broccoli	2	CLASS 233	Rutabaga	5
CLASS 206	Brussels Sprouts	12	CLASS 234	Green Summer Squash	2
CLASS 207	Green Cabbage	2	CLASS 235	Yellow Summer Squash	2
CLASS 208	Red Cabbage	2	CLASS 236	White Summer Squash	2
CLASS 209	Carrots	5	CLASS 237	Acorn Squash	2
CLASS 210	Cauliflower	2	CLASS 238	Butternut Squash	2
CLASS 211	Slicing Cucumber	2	CLASS 239	Buttercup Squash	2
CLASS 212	Pickling Cucumber	5	CLASS 240	Other Winter Squash	2
CLASS 213	Eggplant	2	CLASS 241	Sweet Corn (in husks)	5
CLASS 214	Kohlrabi	2	CLASS 242	Swiss Chard	5
CLASS 215	Muskmelon/Cantaloupe	2	CLASS 243	Red Tomatoes (>2" diam.)	5
CLASS 216	Okra	5	CLASS 244	Roma/Sauce Tomatoes	5
CLASS 217	Yellow Onions	5	CLASS 245	Salad Tomatoes (<2" diam.)	12
CLASS 218	Red Onions	5	CLASS 246	Yellow Tomatoes (>2" diam.)	5
CLASS 219	White Onions	5	CLASS 247	Turnips	5
CLASS 220	Parsnips	5	CLASS 248	Watermelon	2
CLASS 221	Bell Peppers	5	CLASS 249	Edible Dry Beans	1 pint
CLASS 222	Sweet (Non-Bell) Peppers	5	CLASS 250	Gourds, mixed types	5
CLASS 223	Jalapeno Peppers	5	CLASS 251	Gourds, single variety	5
CLASS 224	Hot(Non-Jalapeno) Peppers	5	CLASS 252	Other Vegetable – Do Not duplicate entries in classes	2, 5 or 12
CLASS 225	White Potatoes	5			
CLASS 226	Red Potatoes	5			
CLASS 227	Russet Potatoes	5			
CLASS 228	Other Potatoes	5			
CLASS 255	4-H Vegetable Garden Collection - Five kinds of vegetables displayed in a box not more than 24" in any dimension (State Fair - Boxes will not be returned). 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.				

CLASS 256 4-H Cultivar Vegetable Collection - Vegetables entered in the collection are 5 cultivars from a single exhibit; for example, 5 cultivars of all types of peppers, squash, onions, tomatoes, etc. Display in a box not more that 24" in any dimension (State Fair - Boxes will not be returned). 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).

HERB RULES

- 1. GENERAL RULES** – See VEGETABLE, HERBS & FRUITS GENERAL RULES
- 2. JUDGING CRITERIA** – Herbs will be judged using the same general criteria used for vegetables.
- 3. EXHIBIT GUIDELINES** – 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 glass container of water. Potted herb plants will be disqualified and will not be judged.

DEPARTMENT G PREMIUM	DIVISION 773				HERBS Number to Exhibit
	Purple \$2.50	Blue \$2.00 Number to Exhibit	Red \$1.50	White \$1.00	
CLASS 260	Basil	5	CLASS 265	Parsley	5
CLASS 261	Dill (dry)	5	CLASS 266	Sage	5
CLASS 262	Garlic (bulbs)	5	CLASS 267	Thyme	5
CLASS 263	Mint	5	CLASS 268	Any Other Herb	5
CLASS 264	Oregano	5		(do not duplicate entries in classes 260-267)	

CLASS 269 **4-H Herb Garden** - Display of 5 different herbs. 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.

FRUIT RULES

- 1. GENERAL RULES** – See VEGETABLE, HERBS & FRUITS GENERAL RULES
- 2. JUDGING CRITERIA** – 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.

DEPARTMENT G		DIVISION 773			FRUITS
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00	Number to Exhibit
CLASS 280	Strawberries	1 pint	CLASS 285	Other Small Fruit or Berries	1 pint
CLASS 281	Grapes	2 bunches		(do not duplicate entries in classes 280-284)	
CLASS 282	Apples	5	CLASS 286	Other Fruits or Nuts	5
CLASS 283	Pears	5		(do not duplicate entries in classes 280-284)	
CLASS 284	Wild Plums	1 pint			

DEPARTMENT G		DIVISION 773			NOTEBOOKS & POSTERS
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00	
CLASS 290	Garden Promotion Poster - Individual poster promoting vegetable or herb 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. Entry card must be stapled to the upper righthand corner. The 4-H member's name, age, full address, county and years in the project(s) must be on the back of the poster				
CLASS 291	Educational Vegetable and/or Herb Garden Poster - Prepare a poster no larger than 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 vegetable gardening project. One might show a special technique used or equipment incorporated in the garden. Refer to 4-H horticulture project manuals but use your own creativity. Entry card must be stapled to the upper right hand corner. The 4-H member's name, age, full address, county and years in the project(s) must be on the back of the poster				
CLASS 292	Vegetable and/or Herb Gardening History Interview - Neatly handwritten or typed account of a gardening history interview 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 or small 3-ring notebook. The 4-H member's name, age, full address, county and years in the project(s) must be on the back of the report.				
CLASS 293	Vegetable Seed Display - 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 types. 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 site references on where the scientific name information was found. On the back, label with the 4-H'ers name, age, full address, county and years in the project(s). Information on vegetable family members can be obtained from your Extension Office.				
CLASS 294	World of Vegetables Notebook - 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 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. Protect in a clear report cover or 3-ring notebook. The 4-H'ers name, age, full address, county and years in the project(s) must be on the back of the report cover or notebook.				

DEPARTMENT G		DIVISION 775			SPECIAL GARDEN PROJECT
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00	
CLASS 1	Special Garden Project – Educational Exhibit An educational exhibit based on what was learned in this project. Present information on a poster 14" x 22" either vertical or horizontal arrangement or in a clear plastic report cover. Fresh cut flowers or harvested vegetables should be entered in the appropriate class above. The 4-H exhibitor's name, age, full address, and county must be on the back of the poster or report cover.				
CLASS 2	Special Garden Project – Fresh Cut Flowers or Harvested Vegetables The current years' Special Garden Project fresh cut flowers or harvested vegetables should be entered in this class. Refer to classes 1-45 for quantity to exhibit if special garden project is a fresh cut flower. Refer to classes 201-252 for quantity to exhibit if special garden project is a vegetable.				

GROW A BEAUTIFUL SPACE RULES

- 1. GENERAL RULES** – See GENERAL RULES – HORTICULTURE EXHIBITS
- 2. LABELING OF EXHIBITS** - The 4-H member's name, age, full address, county, and years in the project(s) must be on the back of the notebook, poster, or portfolio.

DEPARTMENT G		DIVISION 777			GROW A BEAUTIFUL SPACE
PREMIUM	Purple \$2.50	Blue \$2.00	Red \$1.50	White \$1.00	
CLASS 401	Grow a Beautiful Space Unit 1 Portfolio Notebook – Create and complete 'Landscape Professionals & Design Principles' Unit 1 Portfolio. Present portfolio information in a three-ring binder. Give proper credit by listing the sources of photographs/images and information used.				
CLASS 402	Establish Landscape Analysis Poster - 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".				
CLASS 403	Grow a Beautiful Space Unit 2 Portfolio Notebook - Create and complete 'Landscape Plants & Materials' Unit 2 Portfolio. Present portfolio information in a three-ring binder. Give proper credit by listing the sources of photographs/images and information used.				
CLASS 404	Landscape Renovation Poster - 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 opaqueness 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".

CLASS 405 Estimating Dreams Poster - 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".

CLASS 406 Site Inventory & Analysis Poster - 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".

CLASS 407 Community Landscape Poster - 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".

CLASS 408 Renovate the Outdoors Portfolio - 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.

SCIENCE, ENGINEERING & TECHNOLOGY

(AEROSPACE, COMPUTERS, ELECTRICITY, LEGOs, ROBOTICS, GEOSPATIAL, WIND ENERGY, WOODWORKING, WELDING, ATV & SMALL ENGINES, & VETERINARY SCIENCE)

GENERAL RULES – SCIENCE, ENGINEERING & TECHNOLOGY

1. **GENERAL RULES** – See GENERAL RULES
2. **ENTRY LIMITS** – Each exhibitor is limited to one entry per class.
3. **DISPLAY BOARDS** – Several classes require a display board which should be a height of 24" and not to exceed ¼" in thickness. A height of 23 7/8" is acceptable to allow for saw kerf (width) if two 24" boards are cut from one end of a 4' x 8' sheet of plywood. Nothing should be mounted within ¾" of the top or bottom of the board.
4. **DEMONSTRATION BOARDS** – Fabricated boards 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.
5. **REPORTS** – All reports should be clearly written or typed and enclosed in a clear, plastic cover. The reports should be attached securely to the display.

AEROSPACE

AEROSPACE RULES

1. **GENERAL RULES** – See GENERAL RULES – SCIENCE, ENGINEERING & TECHNOLOGY
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 ¾" 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. The rockets must be mounted vertically. Please do not attach sideboards or back drops 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 it added stability.
3. **PREPARATION** – Rockets must be equipped as prepared for launching, with wadding and parachute or other recovery system.
4. **DISQUALIFICATION** – Rockets entered with live engines, wrong base size or sideboards will be disqualified. Complete factory assembled rockets will not be accepted at the State Fair.
5. **REPORTS** – A report, protected in a clear plastic cover, must include: 1) rocket specification, 2) a flight record for each launching (weather, distance, flight height), 3) number of launchings, and 4) flight pictures. 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.
6. **JUDGING** – Judging is based upon display appearance, rocket appearance, workmanship, design or capabilities for flight, and number of times launched. Three launches are required to earn the 25 launch points given on the score sheets. Only actual launches count, misfires will not count towards one of the three required launches.
7. **SELF DESIGNED ROCKETS** – For self-designed rockets only, please include a digital recorded copy of one flight. In the documentation please include a description of stability testing before the rocket was flown.
8. **LEVELS** – 4-H rocket project levels are not intended to correspond to the National Association of Rocketry model rocket difficulty ratings or levels. Exhibitors may only enter exhibits at one level of competition.
9. **TOP EXHIBIT** – A top exhibit will be selected from those exhibits receiving purple ribbons in the aerospace division.
10. **MANUALS** – Printed materials are available from the Johnson County Extension Office for all currently enrolled 4-H members in Johnson County.

DEPARTMENT H

PREMIUM

CLASS 901

CLASS 1

CLASS 2

CLASS 3

DIVISION 850

Purple \$2.50

Blue \$2.00

Red \$1.50

White \$1.00

AEROSPACE

Level 1 Display – Display exemplifying one of the principles learned in the Pre-Flight project.

Level 2 Rocket – Any skill level 2 rocket with wooden fins painted by hand or air brush.

Level 2 Display – Display exemplifying one to the principles learned in the *Lift-Off* project. Examples include: display of rocket parts and purpose, interview of someone in the aerospace field, or kite terminology. Display can be any size up to 28" x 22".

Level 2 Rocket – Any skill level 2 rocket with wooden fins painted using commercial application (example: commercial spray paint).