

## DIVISION Q – ENVIRONMENTAL SCIENCES

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### Division Rules & Regulations:

Pre-entry is required. **YOU MUST USE THE INTERNET ENTRY SYSTEMS FOUND AT [www.marylandstatefair.com](http://www.marylandstatefair.com) Internet entries are due July 31st.** Exhibitors without internet access should contact their County Extension Educator for assistance. All release forms are to be completed online through the entry system at time of registration.

1. Only 4-H Members may exhibit in this division. **Exhibitors may only enter 1 exhibit per class.**
2. Exhibitors and exhibits must comply with the "General State Fair Rules & Regulations", "General 4-H and FFA Rules & Regulations", these "Division Rules & Regulations," and the applicable "Section Rules & Regulations".
3. See section for restrictions on case/box size.
4. **Educational displays may not exceed the size of a standard tri-fold display board and must be sturdy enough to stand on a table without support. The following information must be printed on the back of the display in the upper left-hand corner: Exhibitor's Name, Age, Phone #, 4-H County/City.**
5. Display information is expected to be in a member's own words. References should be cited. DO NOT copy and paste/print passages of text directly from references. Direct quotations should be referenced with use of quotation marks and indication of the source. Example: "direct quote." (Smith, 2015)
6. **Judging:** The Judges will, at their own discretion, give placings up to 10<sup>th</sup> place in each class. Unless otherwise noted in section, exhibits will be judged in one of the 4-H Age Divisions: Junior (ages 8-10 as of January 1 of the current year); Intermediate (ages 11-13 as of January 1 of the current year); Senior (ages 14-18 as of January 1 of the current year). **Entries not conforming to class description and/or division/section rules & regulations may be disqualified.**
  - a. Collections will be judged on accuracy in naming and grouping by order, variety of species, neatness in labeling, and neatness in display.
  - b. Displays will be judged on accuracy and completeness of information, neatness, design, and educational value.
7. **Awards:** Ribbons will be awarded to the 1<sup>st</sup> – 10<sup>th</sup> place exhibits in each class. Premiums: 1<sup>st</sup> (\$7), 2<sup>nd</sup>–10<sup>th</sup> (\$5). Rosettes will be awarded to the Junior, Intermediate and Senior and Reserve Champions in each section if there are sufficient entries as determined by the Superintendent.
8. Copyrighted images such as Nike, Coke, McDonalds, and or business names and logos, cartoon characters (Snoopy, Barney, Sponge Bob, etc.) cannot be used because they are protected by copyright law.
9. Entries for this division will be received Tuesday, August 23rd from 2pm to 8pm in the 4-H/FFA Home Arts Building and released Monday, September 12th from 9am to 7pm. An early-bird release period will be made available on Sunday, September 11th from 8pm to 10pm AFTER the building is closed to the public.

## SECTION 1 – NATURAL RESOURCES

### Section Rules & Regulations:

1. Due to limited exhibit space, collections should be limited to one display case per class entered. Case dimensions may not exceed 25" x 30". Photos may be used to indicate the size/scope of collections too large to exhibit in their entirety.
2. Collections should include items collected from nature identified as to common name, scientific name and state, region, or country where collected. NOTE: Senior exhibitors must include additional information appropriate to the collection (e.g. where specimen is grown or found, native vs. non-native collection, dollar value of timber sales for various trees, etc.)

### CLASSES

Junior	Inter.	Senior	Class Description
Q1001	Q2001	Q3001	Shell Collection (min. 15 samples)
Q1002	Q2002	Q3002	Rock Collection (min. 15 unpolished samples)
Q1003	Q2003	Q3003	Leaf Collection (min. 25 different samples from trees, shrubs, etc.)
Q1004	Q2004	Q3004	Mature Tree Bark Collection (min. 15 species)
Q1005	Q2005	Q3005	Wildflower Collection (min. 25 different samples)
Q1006	Q2006	Q3006	Weed Collection (min. 25 different samples)
Q1007	Q2007	Q3007	Fossil Collection (min. 10 different samples)
Q1008	Q2008	Q3008	Soil Collection (min. 10 different samples)
Q1009	Q2009	Q3009	Print Casting (min. 3 samples)
Q1010	Q2010	Q3010	Forestry Educational Display
Q1011	Q2011	Q3011	Wildlife Educational Display
Q1013	Q2013	Q3013	Shooting Sports Educational Display
Q1014	Q2014	Q3014	Sports Fishing Educational Display
Q1015	Q2015	Q3015	Water Quality Educational Display
Q1017	Q2017	Q3017	Recycling Educational Display
Q1018	Q2018	Q3018	Outdoor Recreation Educational Display
Q1020	Q2020	Q3020	Grass Collection (min 10 different samples)

## SECTION 2 - ENTOMOLOGY

### Section Rules & Regulations:

1. Exhibitors may enter 1 general collection in the appropriate class and may also enter a collection in classes: Q29, Q30, and Q31. Exhibits in these classes must be separate from the general collection.
2. Most specimens should be collected and mounted by the exhibitor. **Insects must be mounted according to the instructions in the 4-H Entomology Project Guide, 4-H 225.** Insects of the same order should be grouped together. Specimens must be mounted on standard insect pins.
3. Limited specimen trading is allowed as long as the original collector's label is retained. If the exhibitor is a previous entomology exhibitor, a substantial number of new specimens should have been collected during the previous year. All new specimens collected since last year's fair should be identified by placing a straight pin with a colored head by the insect. Do not use these pins to pin the insects!
4. **Each collection must be accompanied by a 3" x 5" card identifying the number of specimens in the collection, the number of orders in the collection, and the number of specimens collected since last year's fair.**
5. One or more boxes with pinning bottom may be used. Boxes should be at least 5" x 8" in size and covered with glass or other transparent top.

### **CLASSES**

- Q4025 Collection-1<sup>st</sup> year member  
Minimum 25 specimens in 3 or more orders (all specimens must be identified to order)
- Q4026 Collection-2<sup>nd</sup> year member  
Minimum 60 specimens in 5 or more orders (all specimens must be identified to order; extra points will be awarded if specimens are identified to common or family name)
- Q4027 Collection-3<sup>rd</sup> year member  
Minimum 100 specimens in 10 or more orders (all specimens must be identified to family)
- Q4028 Collection-4<sup>th</sup> year and higher member  
Minimum 150 specimens in 15 or more orders (all specimens must be identified to family)

Junior	Inter.	Senior	Class Description
Q1029	Q2029	Q3029	Insect Specialty Collection – a collection of specimens in a special taxonomic group such as a family or genus in a single order. Identify specimens as specifically as possible. Include a brief explanation of the collection on the 3" x 5" card.
Q1030	Q2030	Q3030	Ecologically-related Insect Collection - a collection of specimens which are related to each other by habitat, such as on one plant, in a garden, on an animal, in a household, aquatic insects, etc. Identify specimens at least to order. Include a brief explanation of collection on a 3" x 5" card.
Q1031	Q2031	Q3031	Educational Insect Exhibit – an exhibit suitable for teaching some aspect of entomology. For example, a collection indicating the various type of metamorphosis, (e.g., egg, larva, pupa, and adults of selected insects) or one that shows various types of mimicry (e.g., flies and the bees they mimic, insects with warning coloration, etc.). Include a brief explanation of the collection on a 3" x 5" card.

## SECTION 3 – MISCELLANEOUS SCIENTIFIC EDUCATIONAL DISPLAYS

### Section Rules & Regulations:

1. Exhibitors may enter 1 display per class; exhibits entered in this section may not be entered in other classes in this division.
2. Exhibits may consist of one of the following: demonstration of a scientific idea; performance of an experiment; or presentation of a research project.
3. Only educational displays may be entered, NOT collections. Collections should be entered in the appropriate class in one of the other sections in this division.
4. Graphs, charts, information table, photographs, drawings, etc. may be used in the display. **A printed or typewritten summary must be attached to the display.** See division rules for additional rules for educational displays.
5. Display information is expected to be in a member's own words. References should be cited. DO NOT copy and paste/print passages of text directly from references. Direct quotations should be referenced with use of quotation marks and indication of the source. Example: "direct quote." (Smith, 2015)

### **CLASSES**

Junior	Inter.	Senior	Class Description
Q1050	Q2050	Q3050	Chemistry Science Display - i.e., silver polish, osmosis.
Q1051	Q2051	Q3051	Earth Science Display - i.e., rock layers, weather, crystals.
Q1052	Q2052	Q3052	Physical Science Display - i.e., electricity, dams, erosion.
Q1053	Q2053	Q3053	Planetary Science Display - i.e., space, planets, constellations
Q1054	Q2054	Q3054	Biological/Environmental Science Display – i.e., cells, plant growth, human body, ecosystems, pollution
Q1055	Q2055	Q3055	Agriculture Science Display
Q1056	Q2056	Q3056	Beekeeping Science Display
Q1057	Q2057	Q3057	GIS/GPS Science Display
Q1058	Q2058	Q3058	Aerospace Science Display
Q1059	Q2059	Q3059	Computer Science Display
Q1060	Q2060	Q3060	Science, Technology, Engineering, Math (STEM) Display