



DEPARTMENT 15 - SCIENCE MICHAEL MEADOWS - Superintendent

SPECIFIC RULES:

1. Exhibitors must comply with Department Rules and Regulations.
2. Exhibits must be constructed or developed by exhibitor in the current year. **NO REPEAT ENTRIES!**
3. **ENTRIES WILL BE ACCEPTED AND RETURNED IN ACCORDANCE WITH THE PUBLISHED FAIR SCHEDULE.**

Rules for All Classes - EXCEPT Woodworking, Metalworking, and Electrical

1. Use Project Guides for exhibiting information.
2. Where exhibits are the result of self-directed projects, include a brief description of how the exhibitor developed the project, from original idea to the finished project.
3. Where collections are made up of a number of specimens, the minimum number for a County 4-H Fair exhibit will be 10, except for Insect Collection, which will have at least 15 specimens. Refer to the State Fair for rules concerning various collections so while preparing for exhibition in the County Fair, exhibitor may plan to meet State Fair requirements to have a qualified entry at the State Fair. Follow Project Guides wherever possible.
4. Exhibits must have a statement of the intended purpose of the exhibit and should be accompanied by schematics or diagrams where necessary to show how the exhibit relates to the Science area in which it is entered.
5. Display exhibits should be self-explanatory.

Rules for Woodworking, Metalworking and Electrical Classes

1. Use Project Guides for exhibiting information.
2. **Each article must be accompanied by the plans, blueprints, working drawings, sketches, etc., used for construction. Include a statement as to the intended use of the article. These items should be placed in an envelope and fastened securely to the exhibit by string or tape.**
3. If items were made in a shop class at school (no plans given out), make your own set & include a statement as above.
4. Birdhouses with perches attract unwanted, nonnative birds, not native birds such as blue birds. Therefore birdhouses should be made without perches.

***Computer technology exhibits will be judged as soon as possible after entry, and may be removed by the exhibitor at any time after judging. Superintendent's initials must appear on exhibitor's copy of his/her entry form.**

SECTION A – PHYSICS (Motion, Heat, Light, Sound, Electricity)

Classes

JR	INT	SR	
15101	15201	15301	Practical electrical application
15102	15202	15302	Electronic kit
15103	15203	15303	Electronic game / quizzes
15104	15204	15304	Rocketry, single stage
15105	15205	15305	Rocketry, multi stage
15106	15206	15306	Heat, light, sound or motion display
15107	15207	15307	Miscellaneous physics exhibits

SECTION B - GEOLOGY (Earth's Crust Structure, Rock and Soil Formation)

Classes

JR	INT	SR	
15108	15208	15308	Soil collection (min. 10 different samples)
15109	15209	15309	Diorama/model of a section of earth's crust
15110	15210	15310	Rocks and mineral collection (min. 15 unpolished samples)
15111	15211	15311	Diorama/model of a volcano
15112	15212	15312	Miscellaneous geology exhibit

SECTION C – ECOLOGY (Relationship of Living Things to their Environment, including Entomology, Biology, Zoology)

Classes

JR	INT	SR	
15113	15213	15313	Insect collection (min. 25 specimens in 3 or more orders)
15114	15214	15314	Bark/wood collection (min 15 species)
15115	15215	15315	Leaf/leaf print collection (min. 25 different samples)
15116	15216	15316	Seashell collection (min 15 different samples)
15117	15217	15317	Animal/veterinary science display
15118	15218	15318	Health/safety display
15119	15219	15319	Fishing lure and/or fly collection, label lures and tell for what kind of fish it would be used, state whether flies are wet or dry and for what kind of fishing it would be used
15120	15220	15320	Educational poster, display, etc. about fishing, such as water safety, equipment used, fish habits
15121	15221	15321	Miscellaneous ecology display

SECTION D - ASTRONOMY (Composition, Position, Size and Movement of Heavenly Bodies, including Earth Atmosphere)

Classes

JR	INT	SR	
15122	15222	15322	Weather/Atmosphere Display - Earth or Other Planet
15123	15223	15323	Models or Solar System, Planets and their Moons, etc.
15124	15224	15324	Telescope Models/Diagrams
15125	15225	15325	Miscellaneous Astronomy Exhibits

SECTION E - BOTANY (Plants, their Classifications, Life Cycles, Growth, Structure)

Classes

JR	INT	SR	
15126	15226	15326	Weed collection (min. 25 different samples)
15127	15227	15327	Herbaceous wildflower collection (min. 25 different samples)
15128	15228	15328	Annual/perennial garden diagram/plan
15129	15229	15329	Miscellaneous botany exhibit

SECTION F - CHEMISTRY (Composition, Properties, Conversion and Formulas of Substances)

Classes

JR	INT	SR	
15130	15230	15330	Display, chemical composition of common substances
15131	15231	15331	Display, basic chemistry applied for everyday use
15132	15232	15332	Diagram/model, dry cell battery
15133	15233	15333	Diagram/model, wet cell battery
15134	15234	15334	Miscellaneous chemistry exhibit

APPLIED SCIENCE (Examples of the Sciences at Work for People)

SECTION G - WOODWORKING

Classes

JR	INT	SR	
15135	15235	15335	Wooden bird house/feeder – (without perch, rule #4)
15136	15236	15336	Small wooden furniture, longest dimension less than 22 inches
15137	15237	15337	Large wooden furniture, longest dimension more than 22 inches
15138	15238	15338	Farm or shop woodwork item
15139	15239	15339	Wooden toy or game
15140	15240	15340	Single piece item, only 1 piece of wood
15141	15241	15341	Multi-piece item, two or more pieces of wood

SECTION H – METALWORKING (Small, Indoor)

Classes

JR	INT	SR	
15142	15242	15342	Utility items – grilles, plant holders, trays
15143	15243	15343	Fireplace accessories
15144	15244	15344	Hand tools
15145	15245	15345	Machined parts
15146	15246	15346	Miscellaneous fabricated/welded exhibit

SECTION J – ELECTRICAL

Classes

JR	INT	SR	
15147	15247	15347	Lamps
15148	15248	15348	Extension cords
15149	15249	15349	Drop lights
15150	15250	15350	Miscellaneous electrical/electronic exhibit

SECTION K - COMPUTER TECHNOLOGY

Classes

JR	INT	SR	
15151	15251	15351	Hardware - external I/O device, running, with computer
15152	15252	15352	4-H project, running, with listing and loading instructions
15153	15253	15353	Software - game/other, running, with listing and loading instructions
15154	15254	15354	Documentation - user manual, instructions, flow charts, listings display format

SECTION L - EDUCATIONAL SCIENCE EXHIBIT

An Educational Display or Poster with information that would help educate the public about any phase of Science.

Classes

JR	INT	SR	
15155	15255	15355	Science educational exhibit, ex. shooting sports, sports fishing, recycling, bicycle safety.

SECTION M – ROBOTICS CONTEST

Dwayne Murphy – Assistant Superintendent

1. Contest held Saturday – 9am to Noon
2. Contest will follow game rules published for the State contest. See below.
3. Team consist of 3-8 members
4. Registration Deadline – May 15th. See Below

Class – For Office Use Only

15000	Robotics Contest Team – 3-8 members
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Premium - 1st Place Team - \$10 Club Check

SECTION M – ROBOTICS CONTEST (continued)

- A. Instructions for the Game: <http://extension.umd.edu/4-h/4-h-program-areas/robotics-0>
- B. Registration Form – Print and Mail by May 15.

<http://www.baltimorecounty4hfair.org/roboticsreg.pdf>