

# Department 22: 4-H Nature, Science & Leisure

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## Rules:

1. See Exhibitor Rules at the front of the Fair book.
2. Note that Section 20 is for animal science members, only.
3. Posters and Display Exhibits: All posters must be 14" x 22" in size. All other sizes will be disqualified. Each entry that is a display type must be similar in size, unless otherwise stated in the project book. All others will be displayed only if space is available. Posters and displays will be judged based on visual impact, creativity, neatness, accuracy, and appropriateness of information.

Premiums ..... \$5, 4, 3

## Dept 22 Section 1 - Aerospace Project Area

**Division 1 - Aerospace Level 1 – Pre-Flight** - Poster or Small Display

**Division 2- Aerospace Level 2 – Lift Off** - Poster or Small Display

**Division 3 - Aerospace Level 3 – Reaching New Heights** - Poster or Small Display

**Division 4 - Aerospace Level 4 – Pilot in Command** - Poster or Small Display

## Dept 22 Section 2 - Collectibles Project Area

**Division 1 - Collectibles**

1. Display of collection, 8 – 12 year old
2. Display of collection, 13 – 18 year old

## Dept 22 Section 3 - Crafts & Fine Arts Project Area

**Division 1 - Arts & Crafts - Portfolio Pathways**

1. Painting - One matted or framed painting, ready for hanging, 8 - 12 years old
2. Painting - One matted or framed painting, ready for hanging, 13 - 18 years old
3. Printing - One matted and/or framed print, 8 - 12 years old
4. Printing - One matted and/or framed print, 13 - 18 years old
5. Graphic Designs - One graphic design or three greeting cards, 8 - 12 years old
6. Graphic Designs - One graphic design, or three greeting cards, 13 - 18 years old

**Division 2 - Arts & Crafts - Sketchbook Crossroads**

1. Drawing - One matted drawings ready for hanging, 8 - 12 years old
2. Drawing - One matted drawings ready for hanging, 13 - 18 years old
3. Fiber - Completed work ready for display, 8 - 12 years old
4. Fiber - Completed work ready for display, 13 - 18 years old
5. Sculpture - Completed work from project ready for display, 8 - 12 years old
6. Sculpture - Completed work from project ready for display, 13 - 18 years old

## Dept 22 Section 4 - Electricity Project Area

**Division 1 - Electric Level 1 – Magic of Electricity**

1. Simple working circuit using a light, buzzer, lamp, or other electric powered object.

**Division 2 - Electric Level 2 – Investigating Electricity**

1. Simple telegraph, burglar alarm or rocket launch system

**Division 3 - Electric Level 3 – Wired for Power**

1. Electrical tool and supply kit with items labeled
2. Poster of floor plan(s) of your home (minimum of 5 rooms) showing location of the service entrance panel and all switches, receptacles, and fixtures, using appropriate symbols
3. A switch, labeled as either single pole or three-way, correctly wired

**Division 4 - Electric Level 4 – Entering Electronics**

1. Working integrated circuit
2. LED circuit with blinking light
3. Alarm built using photocell or an SCR intruder alarm

## Dept 22 Section 5 - Engineering Project Area

**Division 1 - Small Engines Level 1 – Crank It Up**

1. External Parts - Display a small (maximum 18 hp) engine with external parts identified by name and function
2. Tools- Display 10 tools or pictures of 10 tools and describe their functions

3. Shop Safety – Display or poster focusing on small engine shop safety

#### **Division 2 - Small Engines Level 2 – Warm It Up**

1. Internal Parts – Display a small (maximum 18 h.p.) engine with internal parts identified by name and function
2. Personal Safety – Display or poster focusing on personal safety in a small engine shop
3. Engine Oil – Display or poster on engine oil viscosity and service classification.

#### **Division 3 - Small Engines Level 3 – Tune It Up**

1. Troubleshooting – Poster or display on troubleshooting an engine, how the problem was identified, and how it was fixed
2. Starting a Business – Display or poster on the research done in consideration of starting a small engine business.

### **Dept 22 Section 6 - Entomology Project Area**

#### **Division 1 - Entomology Levels 1, 2, 3**

1. Year 1 – display minimum of 25, rep. 5 insects
2. Year 2 - display minimum of 50, rep. 7 insect orders
3. Year 3 – display minimum of 75, rep. 9 insect orders
4. Year 4+ – display minimum of 100, rep. 10 insect orders
5. Special Collection - for years 3 & 4+ member only, minimum of 60-80 insects (depending on unit taken) of a unique collection of a specific insect group, must be labeled to identify the unique insect type (for example: aquatic or nocturnal insects), record displayed in a binder.

### **Dept 22 Section 7 - Environmental Science Project Area**

**Division 1 - Exploring Your Environment – Ecosystem's Services** - Poster or Small Display

**Division 2 - Exploring Your Environment – Earth's Capacity** - Poster or Small Display

**Division 3 - Environmental Science – Rain to Drain** - Poster or Small Display

**Division 4 - Environmental Science – Stop the Invasion** - Poster or Small Display

**Division 5 - Water Project Unit 1 – Water Conservation with the Water Lion** - Poster or Small Display

**Division 6 - Water Project Unit 2 – Incredible Water, with the Water Lion** - Poster or Small Display

**Division 7 - Water Project Unit 3 – Water Quality Matters!** - Poster or Small Display

**Division 8 - Water Project Unit 4 – Supplement – Riparian Buffers** - Poster or Small Display

### **Dept 22 Section 8 - Fishing Project Area**

#### **Division - Fishing Level 1 – Take the Bait**

1. Poster of Pictures - four species, fish caught in Pennsylvania with label & brief description. At least one of these pictures must include a picture of you with a fish you caught.
2. Poster of three types of tackle and five types of bait (artificial bait or drawings only - no live bait) labeled (Level 1 only)

#### **Division 2 - Fishing Level 2 – Reel in the Fun**

1. Poster of pictures of seven species of fish caught in Pennsylvania with label and brief description. At least one of these pictures must include a picture of you with a fish you caught.
2. Poster of three types of tackle and five types of bait (artificial bait or drawings only - no live bait) labeled

#### **Division 3 - Fishing Level 3 – Cast into the Future**

1. Poster of pictures of seven species of fish caught in Pennsylvania with label and brief description. At least one of these pictures must include a picture of you with a fish you caught.
2. Poster of three types of tackle and five types of bait (artificial bait or drawings only - no live bait) labeled

### **Dept 22 Section 9 - Forestry Project Area**

**Division 1 - Adopt -A-Tree-Album** - Album of activities completed

**Division 2 - Treetop 4-H Forest Resources Beginner's Guide** - Treetop-touch box

**Division 3 - Trees + Me = Forestry** - Display representing six different trees (leaf, twig, stem, or branch cross section of each) identified

**Division 4 - Advancing in Forestry** - Poster of two completed Roundup ideas

### **Dept 22 Section 10 - Orienteering Project Area**

#### **Division 1 - Orienteering**

1. Poster or small display, 8 – 12 year old
2. Poster or small display by 13 – 18 year old

### **Dept 22 Section 11 - Outdoor Recreation Project Area**

#### **Division 1 - Outdoor Adventures Level 1 – Hiking Trails**

1. Poster - narrative story about one hiking experience & new skills used or knowledge learned on the hike.

#### **Division 2 - Outdoor Adventures Level 2 – Camping Adventures**

1. Poster- narrative story about camping experience, including new skills used/learned from that project during the camping trip. Include at least 3 pictures on poster showing different aspects of your experience.

#### **Division 3 - Outdoor Adventures Level 3 – Backpacking Expeditions**

1. Poster- narrative story about trip. Include at least 3 pictures showing different aspects of your camping experience.

### **Dept 22 Section 12 - Photography & Videography Project Area**

**Division 1 - Photography Level 1 – Focus on Photography**- Poster displaying three photos size 5x7 or smaller taken during project

**Division 2 - Photography Level 2 – Controlling the Image** - Poster displaying three photos size 5x7 or smaller taken during project  
**Division 3 - Photography Level 3 – Mastering Photography** - Poster displaying three photos size 5x7 or smaller taken during project

## **Dept 22 Section 13 - Robotics Project Area**

All members may enter a poster plus the trial run class or the small display class

### **Division 1 - Junk Drawer Robotics Levels 1, 2, 3**

1. Poster showing something learned in the project, 8 – 11 year old
2. Poster showing something learned in the project, 12 – 14 year old
3. Poster showing something learned in the project, 15 – 18 year old
4. Trial run of something made in the project ages 8 – 11 year old or junior
5. Trial run of something made in the project ages 12 – 14 year old or intermediate
6. Trial run of something made in the project ages 15 – 18 year old or senior
7. Small display of something made in the project, 8 – 11 year old
8. Small display of something made in the project, 12 – 14 year old
9. Small display of something made in the project, 15 – 18 year old

## **Dept 22 Section 14 - Rocketry Project Area**

### **Division 1 - Rocketry**

1. Unit I - Single stage rocket - simple tube design
2. Unit II - Single stage rocket - more advanced design
3. Advanced - Basic multi-stage rocket
4. Advanced - More advanced multi-stage rocket
5. One bottle rocket
6. Poster or small display

## **Dept 22 Section 15 - Self Determined, Scrapbooking, Hobby Project Area**

**Division 1 - Hobby Project** - display will be a collection or completed article(s) as described in the project book.

- |   |  |
|---|--|
| 1. Original Design Hobby - 8 - 12 years old     | 2. Original Design Hobby - 13 - 18 years old     |
| 3. Hobby from Pattern or Kit - 8 - 12 years old | 4. Hobby from Pattern or Kit - 13 - 18 years old |
| 5. Model - 8 - 12 years old                     | 6. Model - 13 - 18 years old                     |
| 7. Pottery - 8 - 12 years old                   | 8. Pottery - 13 - 18 years old                   |
| 9. Ceramics - 8 - 12 years old                  | 10. Ceramics - 13 - 18 years old                 |
| 11. Jewelry - 8 - 12 years old                  | 12. Jewelry - 13 - 18 years old                  |
| 13. Plastic Canvas - 8 - 12 years old           | 14. Plastic Canvas - 13 - 18 years old           |
| 15. Latch Hook - 8 - 12 years old               | 16. Latch Hook - 13 - 18 years old               |
| 17. Tie Blanket - 8 - 12 years old              | 18. Tie Blanket - 13 - 18 years old              |
| 19. Construction Art - 8 - 12 years old         | 20. Construction Art - 13 - 18 years old         |
| 21. Cutting & Pasting Art - 8 - 12 years old    | 22. Cutting & Pasting Art - 13 - 18 years old    |
| 23. Mural Madness - 8 - 12 years old            | 24. Mural Madness - 13 - 18 years old            |
| 25. Other Hobby Project - 8 - 12 years old      | 26. Other Hobby Project - 13 - 18 years old      |

### **Division 2 - Self Determined**

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|---|--|
| 1. Poster or Small Display - 8 - 12 years old | 2. Poster or Small Display - 13 - 18 years old |
|---|--|

### **Division 3 - Scrapbooking**

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|--|--|
| 1. Scrapbook - 8 - 12 years old, 4 double or 8 single page minimum | 2. Scrapbook - 13 - 18 years old, 6 double or 12 single page minimum |
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## **Dept 22 Section 16 - Shooting Sports Project Area**

Members must enroll in 4-H Online for specific shooting sports disciplines as the project area.

### **Division 1 - Shooting Sports – Air Pistol**

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|---|--|
| 1. Poster or Small Display - 8 - 12 years old | 2. Poster or Small Display - 13 - 18 years old |
|---|--|

### **Division 2 - Shooting Sports – Air Rifle**

- |   |  |
|---|--|
| 1. Poster or Small Display - 8 - 12 years old | 2. Poster or Small Display - 13 - 18 years old |
|---|--|

### **Division 3 - Shooting Sports – Archery**

- |   |  |
|---|--|
| 1. Poster or Small Display - 8 - 12 years old | 2. Poster or Small Display - 13 - 18 years old |
|---|--|

### **Division 4 - Shooting Sports – Riflery**

- |   |  |
|---|--|
| 1. Poster or Small Display - 8 - 12 years old | 2. Poster or Small Display - 13 - 18 years old |
|---|--|

**Division 5 - Shooting Sports – Shotgun**

- 1. Poster or Small Display - 8 - 12 years old
- 2. Poster of Small Display - 13 - 18 years old

**Dept 22 Section 17 - Veterinary Science Project Area**

**Division 1 - Veterinary Science Level 1 –From Airedales to Zebras** - Poster or Small Display

**Division 2 - Veterinary Science Level 2 –All Systems Go** - Poster or Small Display

**Division 3 - Veterinary Science Level 3 –On the Cutting Edge** - Poster or Small Display

**Dept 22 Section 18 - Wildlife Project Area**

**Division 1 - Wildlife Project Unit 1, The Wildlife Ecologist** - completed nature journal based on the suggested activities in the project book

**Division 2 - Wildlife Project Unit 2, The Wildlife Manager** - completed nature journal based on the suggested activities in the project book

**Division 3 - Wildlife Is All Around Us Book 1 – The Wildlife Detective** - Poster or Small Display

**Division 4 - Wildlife Is All Around Us Book 2 – Spring** - Bird house

**Division 5 - Wildlife Is All Around Us Book 3 – Summer** - Minimum of three labeled track plaster casts

**Division 6 - Wildlife Is All Around Us Book 4 – Fall** - Poster of a map describing different types of cover for animals(labeled)

**Division 7 - Wildlife Is All Around Us Book 5 – Winter** - Poster or exhibit describing animal signs that can be found in winter

**Dept 22 Section 19 - Woodworking Project Area**

**Division 1 - Woodworking Levels 1, 2, 3**

- 1. Small Accessory - 8 - 12 years old
- 2. Small Accessory - 13 - 18 years old
- 3. Small Furniture - 8 - 12 years old
- 4. Small Furniture - 13 - 18 years old
- 5. Large Accessory - 8 - 12 years old
- 6. Large Accessory - 13 - 18 years old
- 7. Large Furniture - 8 - 12 years old
- 8. Large Furniture - 13 - 18 years old
- 9. Projects without finish, finish not desired - 8 - 12 years old
- 10. Projects without finish, finish not desired, 13 - 18 years old

**Dept 22 Section 20 - Animal Science Project Area**

**Division 1 - Animal Science**

Member who takes project areas that either do not have a show option, or who are not able to participate in the animal Roundup show. Class Classes:

- 1. Dog - poster or small display
- 2. Cat - poster or small display
- 3. Pet - poster or small display
- 4. Embryology - poster or small display
- 5. Horseless - poster or small display
- 6. Other Animal Science Project - poster or small display

**Best of Show**

**Champion Nature, Science & Leisure Entry sponsored by The Boot Box.....Rosette & Trophy**  
**Reserve Champion Nature, Science & Leisure sponsored by The Boot Box.....Rosette & Trophy**