



## Project Title: Aerospace

### Description:

The 4-H aerospace program provides youth with educational information and experiences about aerodynamics, flight and rocketry.

### State Fair Entries:

3 rockets, drones (UAV), remote control aircraft, posters, notebooks or display boards per county; one per level.

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

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Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

"Ready to Fly" and E2X rockets are not permitted. Rockets may be exhibited with a base, but launch pads are not permitted. All rockets must weigh less than 3.3 pounds and considered an amateur rocket according to FAA regulations. Remote control aircraft or drones may be constructed from a kit or purchased ready-to-fly. The power source (rocket engine, battery pack, etc.) is to be removed before being placed in public exhibition.

Rockets will not be launched and remote control aircraft or drones will not be flown at state fair. Launching rockets and flying aircraft or drones at the county level is optional based on adult supervision experience.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Construct a rocket of your choice designed for a new model rocket enthusiast with a difficulty level that is appropriate for the suggested grade level, or a poster or display board on any topic in the manual. Similar topics not included in the manual are permissible. Rockets cannot be ready-to-fly (RTF) or have plastic fins. Cluster engine rockets and rockets that take an engine D or above are not permitted in this level.

Learn to fly a remote control aircraft or drone of your choice that is age/grade appropriate and compliant with FAA regulations, federal and state laws, and local ordinances. This exhibit choice is to include a notebook or poster including how the aircraft/drone was used and aerospace skills learned. Displaying the aircraft or drone is optional. Other topics could include how a quadcopter operates, controls used to fly a quadcopter, UAV regulations administered by Federal Aviation Administration, commercial and emergency uses of UAVs, and more.

### *Intermediate (grades 6-8 suggested)*

Construct a rocket of your choice designed for a model rocket enthusiast with some experience and with a difficulty level that is appropriate for the suggested grade level, or a poster or display board on any topic in the manual. Similar topics not included in the manual are permissible. Rockets cannot be ready-to-fly (RTF) or have plastic fins. Cluster engine rockets and rockets that take an engine E or above are not permitted in this level.

Construct or learn to fly a remote control aircraft or drone of your choice that is age/grade appropriate and compliant with FAA regulations, federal and state laws, and local ordinances. This exhibit choice is to include a notebook or poster including how the aircraft/drone was used and aerospace skills learned. Displaying the aircraft or drone is optional. Other topics could include interviewing a certified UAV pilot who works in law enforcement, EMS, fire, Purdue Extension, commercial or other application. Other options could include creating a flight plan or interfacing with other computer software.

### *Advanced (grades 9-12 suggested)*

Construct a rocket of your choice designed for an experienced model rocket enthusiast and with a difficulty level that is appropriate for the suggested grade level, or a poster or display board on any topic in the manual. Similar topics not included in the manual are permissible. Rockets cannot be ready-to-fly (RTF) or have plastic fins. Cluster engine rockets and rockets that take an engine G or above are not permitted in this level.

Construct or learn to fly a remote control aircraft or drone of your choice that is age/grade appropriate and compliant with FAA regulations, federal and state laws, and local ordinances. This exhibit choice is to include a notebook or poster including how the aircraft/drone was used and aerospace skills learned. Displaying the aircraft or drone is optional. Other topics could include using “stitching” software to produce an orthomosaic map for a research purpose, identifying Department of Transportation Aeronautical Chart features and explain how these are important to a drone pilot, how to obtain a drone pilot license, or more. If 16 years of age or older the member could obtain a license by completing and passing the official FAA Part 107 UAV licensing test.



## Project Title: Animal Education

### Description:

Youth can learn about livestock and companion animals through a variety of experiences.

### State Fair Entries:

- 1 Beef entry per county.
- 3 Cat entries per county; one per level.
- 1 Dairy Cattle entry per county.
- 3 Dog entries per county; one per level.
- 1 Goat entry per county.
- 1 Horse entry per county.
- 3 Llama entries per county; one per level.
- 3 Poultry entries per county; one per level.
- 3 Rabbit entries per county; one per level.
- 1 Sheep entry per county.
- 1 Swine entry per county.

### Exhibit Guidelines:

Owning or showing an animal is not required. Members enrolled in any 4-H animal or livestock project can exhibit in this project and are to contact their county 4-H educator to learn if they are to also be enrolled in animal education.

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## Exhibit Class Guidelines:

### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any species related topic of choice that is age/grade appropriate. Check with the Purdue Extension office in your county to determine if enrollment is required in the species project you want to learn about. Owning or possessing an animal is not required.

### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any species related topic of choice that is age/grade appropriate. Check with the Purdue Extension office in your county to determine if enrollment is required in the species project you want to learn about. Owning or possessing an animal is not required.

### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any species related topic of choice that is age/grade appropriate. Check with the Purdue Extension office in your county to determine if enrollment is required in the species project you want to learn about. Owning or possessing an animal is not required.



## Project Title: ATV Safety and Operator Skills

### Description:

The ATV safety and operator skills project provides an opportunity for youth to learn safe riding habits and vehicle maintenance.

### State Fair Entries:

3 posters, notebooks or display boards per county.

### Exhibit Guidelines:

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### Exhibit Class Guidelines:

#### Educational Exhibits

##### *Beginner (grades 3-5 suggested)*

Create an age/grade appropriate poster, notebook or display about ATV safety or maintenance.

##### *Intermediate (grades 6-8 suggested)*

Create an age/grade appropriate poster, notebook or display about ATV safety or maintenance.

##### *Advanced (grades 9-12 suggested)*

Create an age/grade appropriate poster, notebook or display about ATV safety or maintenance.

#### Riding Skills Option (grades 3-12)

An optional group ride and riding skills obstacle course is available at the county level if supervised by a certified ATV safety adult volunteer.



## Project Title: Beekeeping

### Description:

This project will help youth learn beekeeping, the types of bees, the honey and wax they produce, the plants that attract bees, and the equipment a beekeeper needs.

### State Fair Entries:

- 1 educational exhibit per county.
- 1 honey exhibit per member, unlimited number of county entries.

### Exhibit Guidelines:

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#### Special Notes:

- There are no age/grade specifications for beekeeping exhibits. No bee hives may be brought to the State Fair.
- Honey water content will be measured.
- Fill level: the honey should be filled to the jar shoulder, not over, nor under
- Chunk honey should go in a wide-mouth jar, preferably one specially made for chunk honey (see beekeeping catalogs).
- Be careful to distinguish "chunk honey"(comb in jar) from "cut comb" (comb only in box). Honey (including chunk, cut comb and comb) must be collected since the previous county fair.

### Exhibit Class Guidelines:

#### *Educational Poster or Display (grades 3-12)*

Create an educational poster, notebook or display about any manual activity or on any beekeeping topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.

### *Extracted Honey (grades 3-12)*

Exhibit 2 one-pound jars, shown in glass or clear plastic, screw-top jars holding 1 pound of honey each. Each container is to have the 4-H member's name and county written using permanent marker.

### *Chunk Honey (grades 3-12)*

Exhibit 2 one-pound jars (wide-mouth glass or clear plastic) with a comb in each jar. Each container is to have the 4-H member's name and county written using permanent marker.

### *Cut-comb Honey (grades 3-12)*

Exhibit 2 one-pound boxes. Boxes are usually 4 1/2" x 4 1/2" in size. Each box is to have the 4-H member's name and county written using permanent marker.

### *Two Honey Product*

Exhibit 4 containers total of two different honey products using extracted honey, chunk honey or cut-comb honey as described in each product above.



## Project Title: Bicycle

### Description:

The 4-H bicycle project teaches safe riding habits.

### State Fair Entries:

No state fair entries.

### Exhibit Guidelines:

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### Exhibit Class Guidelines:

#### Educational Exhibits

##### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about a bicycle topic of choice that is age/grade appropriate.

##### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about a bicycle topic of choice that is age/grade appropriate.

##### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about a bicycle topic of choice that is age/grade appropriate.



## Riding Skills Option (grades 3-12)

Some county 4-H programs offer group rides and/or an obstacle course to develop safe riding habits and skills. Check with your county 4-H educator to learn more.



## Project Title: Child Development

### Description:

Youth will learn about developmental stages of infants, toddlers and young children.

### State Fair Entries:

4 entries per county; one per level.

### Exhibit Guidelines:

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Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Activities may be designed to be displayed on the floor, but please be considerate of space availability. Each item is to be labeled with the 4-H member's name, county and club so fair staff can keep all components together if it needs to be moved after judging is complete.

Notebooks are to include the following:

- Identifications on the front showing 4-H member's name, county, club, grade and year in project.
- Title page naming the activity.
- Pages explaining how activity was developed and is to be used.
- Photographs showing how the activity was used along with assembly.
- Explanation of skills learned and any additional information to share with the reader.

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### Exhibit Class Guidelines:

#### *Level A (grades 3-4 suggested)*

Exhibit a poster, display, or notebook about a manual activity. Other similar activities are permissible.

### *Level B (grades 5-6 suggested)*

Exhibit a poster, display, or notebook about a manual activity. Other similar activities are permissible.

### *Level C (grades 7-9 suggested)*

Exhibit a poster, display, or notebook about a manual activity. Other similar activities designed to help develop physical, emotional or cognitive skills are permissible.

### *Level D (grades 10-12 suggested)*

Exhibit a poster, display, or notebook about a manual activity. Other similar activities designed to help develop physical, emotional or cognitive skills are permissible.



## Project Title: Computer Science

### Description:

The 4-H computer science project is designed for youth to engage in an interactive project to learn all levels of familiarity with computers.

### State Fair Entries:

3 per county; one per grade level division.

### Exhibit Guidelines:

There are three exhibit grade level divisions; Grades 3-5, Beginner; Grades 6-8, Intermediate; and Grades 9-12, Advanced. Exhibits are to be skill appropriate for the member's grade level.

Youth enrolled in the computer project will select one of the below subject categories to study, regardless of grade. Youth may choose to create an exhibit demonstrating skills learned during the year. Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. The majority of the work to create this exhibit is to be the 4-H member's original work. Check with your county Purdue Extension Office to determine if a computer will be available during judging and if there will be an opportunity to explain your exhibit to the judge. Exhibits qualifying for state fair are to be submitted on a thumb drive securely attached to a notebook/portfolio describing accomplishments, skills learned, design ideas, budget, a summary of what was done, screenshots showing the development and final project, etc. as the exhibitor will not be able to discuss their work with a judge. Poster and display board exhibits are permissible. Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect content. **The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board.** Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff. Youth may continue in the same subject category in subsequent years, expand the previous year's topic, or choose a new topic. Subject categories are:

- [Programming, Block- and Text-based Programming](#)
- [Web Design and Computer Entrepreneurship](#)
- [Computer Forensics](#)
- [Hardware and Networking Design/Install/Repair](#)
- [Graphic Design, Computer Art, and 3-D Printing](#)
- [Robotics](#)
- [Videography](#)

Software submitted to be reviewed by a judge must be compatible on both PC and Mac platforms. If additional software other than Microsoft Office Suite is required to view the member's work, that software must be provided by the member and comply with all manufacturer copyright laws. Apps can be Android or IOS compatible.

All notebooks/portfolios must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is

recommended this reference list be the last page of a notebook or included as part of the display visible to the public. A judge is not to discredit an exhibit for the manner in which references are listed.

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## Exhibit Class Guidelines:

### **Programming, Block- and Text-based Programming:**

Youth can submit programming projects in a language of their choosing. Some popular choices include, but are not limited to:

- Block-based: Scratch, Code Studio, Alice, etc.
- Text-based: Python, JavaScript, C/C++, C#, ASP.net, R, Go, Java, PHP, Perl, Ruby, etc.

Beginner (Grades 3-5) – Create a program using a programming language of your choice. You should comment on your work, and it must include at least ten different commands. Skills this program could use are:

- Sequence
- Iteration
- Conditionals
- Variables
- Loops
- User input
- Any other similar skill

Intermediate (Grades 6-8) – Create a program using a programming language of your choice. You should comment on your work, and it must include at least ten different commands. Skills this program could use are:

- More robust demonstration of beginner skills
- Commenting
- Correct syntax
- Lists
- Functions
- Algorithms
- Modularization
- Lists
- Any other similar skill

Advanced (Grades 9-12) – Create a program using a programming language of your choice. You should comment on your work, and it must include at least ten different commands. Skills this program could use are:

- More robust demonstration of Intermediate Skills
- Parameters
- Recursion

- Interact with databases
- Classes
- Objects
- Methods
- Inheritance
- Integrate multiple languages into one program
- Demonstrate utilization of a version control system
- Any other similar skill

## Web Design and Computer Entrepreneurship

All Divisions: A notebook detailing your steps/process is highly recommended.

Beginner Web Design and Computer Entrepreneurship - (Grades 3-5) - Build a website demonstrating a knowledge of:

- Use a website builder to create your website
- Insert non-stock image into your site
- Use a template to achieve a unified look
- Explain CSS in your documentation, what CSS is and why it's important
- Must have at least two pages and include all items listed above

Intermediate Web Design and Computer Entrepreneurship – (Grades 6-8) - Build a website demonstrating a knowledge of:

- Create your own site or use a website builder
- Modify existing HTML
- Use HTML5
- Modify existing CSS
- Have a unified theme throughout
- Use a photo editing software to create custom images
- Must have at least five pages and include all items listed above

Advanced Web Design and Computer Entrepreneurship – (Grades 9-12) - Build a website demonstrating a knowledge of:

- Create a custom site using appropriate industry tools
- Have a responsive website
- Add useful and appropriate plugins
- Test for and eliminate bugs
- Include links for social media
- Include custom audio/video
- Must have at least ten pages and include all items listed above

# **Computer Forensics (ID theft, online bullying, ethical use of technology, responsible social media use)**

**All Divisions: A notebook detailing your steps/process is highly recommended.**

Beginner Computer Forensics – (Grades 3-5) – Research and create a 3–5-minute presentation on one of the following topics. Present to a group of peers and have an adult leader verify, create a YouTube or MP4 instructional video, or printed slides and notes using PowerPoint or similar presentation software.

- Media Balance and Well Being
- Privacy and Security
- Digital Footprint and Identity
- Relationships and Communication
- Cyberbullying, Digital Drama and Hate Speech
- News and Media Literacy
- Any other similar topic

Intermediate Computer Forensics – (Grades 6-8) – Research and create a 6–8-minute presentation on one of the following topics. Present to a group of peers and have an adult leader verify, create a YouTube or MP4 instructional video, or printed slides and notes using PowerPoint or similar presentation software.

- Digital Citizenship:
  - Media Balance and Well Being
  - Privacy and Security
  - Digital Footprint and Identity
  - Relationships and Communication
  - Cyberbullying, Digital Drama and Hate Speech
  - News and Media Literacy
- Cyber Security
  - Ethics and Society
  - Security Principles
  - Classic Cryptography
  - Malicious Software
  - Physical Security
  - Web Security
- Any other similar topic

Advanced Computer Forensics – (Grades 9-12) – Research and create a 10–12-minute presentation on one of the following topics. Present to a group of peers and have an adult leader verify, create a YouTube or MP4 instructional video, or printed slides and notes using PowerPoint or similar presentation software.

- Digital Citizenship:
  - Media Balance and Well Being
  - Privacy and Security
  - Digital Footprint and Identity

- Relationships and Communication
- Cyberbullying, Digital Drama and Hate Speech
- News and Media Literacy
- Cyber Security
  - Ethics and Society
  - Security Principles
  - Classic Cryptography
  - Malicious Software
  - Physical Security
  - Web Security
- Any other similar topic

## **Computer Hardware and Networking Design/Install/Repair**

**All Divisions: A notebook detailing your steps/process is highly recommended.**

Beginner – (Grades 3-5) – Choose 1-2 items from the list and create a report/presentation (including images) of what you did.

- Deconstruct and reconstruct a computer
- Learn and report how binary works and how computers use numbers
- Troubleshoot hardware problems
- Explore operating systems
- Investigate open-source resources
- Install/upgrade operating systems
- Design a dream machine (give reasons)
- Any other similar design/install/repair

Intermediate – (Grades 6-8) – Choose 1-2 items from the list and create a report/presentation (including images) of what you did.

- Identify network hardware
- Design a computer network
- Explain Internet Protocol
- Explain different types of servers
- Use different protocols to communicate
- Add peripherals to a network
- Secure a networked computer
- Share applications simultaneously
- Setup a Raspberry Pi or other micro-controller
- Any other similar design/install/repair

Advanced – (Grades 9-12) - Choose one or two items from the list and create a report/presentation (including images) of what you did.

- Design and implement a computer network



- Secure your network
- Understand the technological needs of your community.
- Help to solve these needs by organizing a committee or team to work on identified issues.
- Teach a computer science class to younger 4-Hers.
- Build your dream computer
- Network multiple micro-controllers
- Research careers in technology
- Any other similar design/install/repair

## Graphic Design and Computer Art

### Graphic Design

There are three divisions: Beginner (Grades 3-5), Intermediate (Grades 6-8) and Advanced (Grades 9-12). Youth are to use a software program to create or design an item that requires graphic design. The name of the software and version is to be included in the exhibit. Exhibits are to be age/grade appropriate. Ideas include, but are not limited to, the following:

- Logo design
- T-shirt or apparel screen printing design
- Promotional brochure
- Marketing materials
- Computer altered photographs/images – Photographs taken by the 4-H member and altered by the 4-H member using a computer are to be entered into the Photography project as a creative/experimental exhibit. Youth must obtain permission from the owner before altering someone else's photograph/image and include a copy of that permission with the exhibit to ensure there is no copyright violation.

### Computer Art

There are three divisions: Beginner (Grades 3-5), Intermediate (Grades 6-8) and Advanced (Grades 9-12). Youth are to use a software program to create or design an item that requires artistry. Youth may design and create their own work in totality or can use a pre-made template or design to create their own finished product, provided the majority of the created exhibit is completed by the 4-H member. The name of the software and version is to be included in the exhibit. Exhibits are to be age/grade appropriate. **A notebook detailing your steps/process is highly recommended.**

### 3-D Printing

#### Beginner (Grades 3-5)

- Youth can use premade designs with minor modifications. Youth should document the modifications, and cite any sources used for the project.

#### Intermediate (Grades 6-8)

- Youth can use premade designs with modifications. Youth should document the modifications, and cite any sources used for the project.

#### Advanced (Grades 9-12).

- Youth are to use a software program to create or design an item printed using a 3-D printer. Youth are encouraged to design and create their own work in totality.
- If youth use a pre-made template, modify enough so that the majority of the design is completed by the 4-H member. Youth must cite any sources used for the project.

All divisions should include:

- The name of the software and version
- Printer make and model
- Notebook detailing steps as well as the files you printed
- Exhibits are to be age/grade appropriate

## Robotics

Suggested exhibits include, but are not limited to, a notebook including a printout of code with requirements marked, a flowchart showing how the robot works, images of the robot being built and the final robot in action, a video, a live demonstration, or other applicable exhibits. **A notebook detailing your steps/process is highly recommended.**

Beginner (Grades 3-5)

- Create a flowchart
- Build a robot
  - Use block- or text-based program to operate
    - Sequential programs
    - Events at beginning
  - Use at least one basic sensor
  - Model and demonstrate robot behaviors using a simulation environment (e.g. VEXcode VR [<https://vr.vex.com>])

Intermediate (Grades 6-8)

- Create a flowchart with sub-routines
- Include at least two sensors in robot
- Use at least three events in code
- Create at least 2 loops in code
- Operation of robot should be smooth

Advanced (Grades 9-12) - Above guidelines plus:

- Use text-based language
- Use advanced logic including
  - Multiple (three or more) events
  - Multiple (three or more) loops
  - At least three sub routines
  - Special consideration if robot is not a kit

# Videography

Suggested exhibits include A completed video project (e.g., documentary, commercial, short story, instructional, or innovation video are a few suggestions), A notebook or portfolio detailing the process, which should include:

- Planning steps
- Storyboarding
- Script
- Equipment/software used
- Editing steps
- Reference list (sources, interviews, websites, etc.)

## Beginner (Grades 3-5)

- Create a flowchart of the video process
- Build a simple video project using basic editing tools
- Use block- or text-based programs for any automation or effects
- Demonstrate sequential planning and basic events (e.g., opening credits, transitions)
- Use at least one basic effect or technique (e.g., fade-in, title screen)

## Intermediate (Grades 6-8)

- Create a flowchart with sub-routines (e.g., scenes, chapters)
- Include at least two advanced effects or editing techniques
- Use at least three events in the video (e.g., transitions, overlays, audio cues)
- Create at least two loops or repeated elements (e.g., recurring theme music)
- Ensure smooth operation and flow of the video

## Advanced (Grades 9-12) - Above guidelines plus:

- Use text-based editing or scripting tools for advanced logic
- Incorporate multiple (three or more) events and loops
- Include at least three sub-routines (e.g., intro, body, conclusion)
- Special consideration for original work (not using templates or kits)

## Additional Notes:

- All divisions should encourage creativity and originality.
- Exhibits must be age/grade appropriate.
- Judges should use these guidelines as a reference, not a strict requirement, and recognize individual differences and creativity.



## Project Title: Electric

### Description:

The 4-H electricity and electronics program provides youth with educational information about electricity and how it can be used to benefit the human race.

### State Fair Entries:

5 electric exhibits per county, one per level

1 electronic exhibit per county, level 5

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Youth are encouraged to complete the activities as instructed in the manual or found on the [4-H electric web page](#).

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### Electric Level 1 (1<sup>st</sup> year in Electric)

**Exhibit** one article of choice displaying proper wiring techniques, made during the current 4-H program year. It must demonstrate a minimum of five (5) or more of the appropriate level of "Skills to be Attained" items as outlined in the "4-H Electric and Electronic Skills & Knowledge Chart". A completed copy of the "Exhibit Skills & Knowledge Sheet" must accompany the project. Skills sheets are for judging purposes only and will not be returned to the exhibitor.

#### Exhibit Suggestions:

- Circuit board – 6" by 6" of Series/Parallel Circuit
- Electromagnet

- Galvanometer
- Poster board (22" by 28")
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Electricity Excitement Book 1 or Investigating Electricity Book 2, Purdue Extension website Level 1 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

## **Electric Level 2 (2<sup>nd</sup> year in Electric)**

**Exhibit** one article of choice displaying proper wiring techniques, made during the current 4-H program year. It must demonstrate a minimum of five (5) or more of the appropriate level of "Skills to be Attained" items as outlined in the "4-H Electric and Electronic Skills & Knowledge Chart". A completed copy of the "Exhibit Skills & Knowledge Sheet" must accompany the project. Skills sheets are for judging purposes only and will not be returned to the exhibitor.

### **Exhibit Suggestions:**

- Magnetic Powered Shake Flashlight – with optional display
- Circuit board – 6" by 6" of Series/Parallel Circuit (with modifications if exhibited in Level 1)
- Electromagnet
- Galvanometer
- Electric Motor
- Poster board (22" by 28")
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Electricity Excitement Book 1 or Investigating Electricity Book 2, Purdue Extension website Level 2 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

## **Electric Level 3 (3<sup>rd</sup> year in Electric)**

**Exhibit** one article of choice displaying proper wiring techniques, made during the current 4-H program year. It must demonstrate a minimum of five (5) or more of the appropriate level of "Skills to be Attained" items as outlined in the "4-H Electric and Electronic Skills & Knowledge Chart". A completed copy of the "Exhibit Skills & Knowledge Sheet" must accompany the project. Skills sheets are for judging purposes only and will not be returned to the exhibitor.

### **Exhibit Suggestions:**

- Wiring Project – (ie. extension cord, trouble light, wire sizes and uses, plug configurations, test equipment, replace cord/cord end on a tool or piece of equipment, etc.)
- Electrical tool and supply kit
- Poster board (22" by 28")
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Wired for Power Book 3, Purdue Extension website Level 3 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

## **Electric Level 4 (4<sup>th</sup> year in Electric)**

**Exhibit** one article of choice displaying proper wiring techniques, made during the current 4-H program year. It must demonstrate a minimum of five (5) or more of the appropriate level of "Skills to be Attained" items as outlined in the "4-H Electric and Electronic Skills & Knowledge Chart". A completed copy of the "Exhibit Skills & Knowledge Sheet" must accompany the project. Skills sheets are for judging purposes only and will not be returned to the exhibitor.

Attained” items as outlined in the “4-H Electric and Electronic Skills & Knowledge Chart”. A completed copy of the “Exhibit Skills & Knowledge Sheet” must accompany the project. Skills sheets are for judging purposes only and will not be returned to the exhibitor.

**Exhibit Suggestions:**

- Wiring – Wire a lamp. The lamp can be a re-wired lamp or one that is built new.
- Electrical tool and supply kit
- Poster board (22” by 28”)
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Wired for Power Book 3, Purdue Extension website Level 4 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.

## **Electric Level 5 (5<sup>th</sup> year or more in Electric)**

**Exhibit** one article of choice, displaying proper wiring techniques, made during the current 4-H program year that demonstrates a minimum of five (5) or more of the appropriate level of “Skills to be Attained” items as outlined in the “4-H Electric and Electronic Skills & Knowledge Chart”. A completed copy of the “Exhibit Skills & Knowledge Sheet” must accompany the project. Skills sheets are for judging purposes only and will not be returned to the exhibitor.

**Exhibit Suggestions:**

- Equipment Wiring – including but not limited to: parts identification, appliance repair, lamps and other lighting, equipment wiring, control system, security system, topic that covers safety, motors/generators, electric heating, heat pumps, AC, water heaters, and other electric equipment.
- Home Wiring – included by not limited to any circuits found in the wiring of a house or “barn”, service entrance, switching, receptacles, generator transfer circuit, safety, electrical math, and others.
- Electronic Equipment – Any project or kit containing transistors or integrated circuits or vacuum tubes such as radio, TV, computer, robot, cell phone, and others.
- Poster board (22” by 28”)
- Display (appropriately sized for displayed equipment)
- Notebook/Report that covers any topic that is in the National 4-H Electric Curriculum Entering Electronics, Purdue Extension website Level 5 activities/project sheets, or from the appropriate level of the Skills & Knowledge Chart. Refer to the Written Report Scorecard, 4-H 824, to determine expected items to be included.
- Video Presentation Create a video showing the work accomplished and skills learned. This video should include the same type of information as required in written notebook listed above. This video is to be no more than ten minutes in length and formatted as MP4 and submitted on a thumb drive. This video can also be uploaded to a YouTube account with the video being made public and the link submitted for evaluation.



## Project Title: Entomology

### Description:

This project will help you study insects and their relationship with people. You can also learn how to collect, preserve, and identify insects.

### State Fair Entries:

3 collection exhibits per county, one per level

3 educational exhibits per county, one per level

### Educational Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Collection Exhibit Guidelines:

Specimens may be displayed in a collection box no larger than 24"x 18"x 3", displayed horizontally. Collections are to include the following:

- Title as Insect Collection year in Entomology
- Order – refer to ID-401, page 57.
- Display – mounted insects are to have been legally and personally collected in the United States and displayed in an 18"x24" collection box displayed horizontally. Collections including multiple boxes are to be numbered 1 of 3, etc. ID 401 A-F cards (for Beginner and Intermediate) and 401-I cards (for Advanced) are to be placed inside the display box in an attractive manner.
- Identification – Collection display boxes are expected to contain the specified number of insects, families, and orders specified (see chart below). All insects must be in the adult stage and be properly mounted on insect pins or be contained in vials as directed.
- Pin Labels - Each pin or vial must contain two labels:
  - 1) Top label is to include collection date, location, and collector name.
  - 2) Bottom label is to include common name and other optional identification data.
- Box Labels – Box labels (computer generated or neatly printed) are used for orders and families as required (see chart below) and are to be placed flat against the bottom of the box. Insects must be properly grouped

directly under the correct order and family label. For example, all insects belonging to a particular order must be placed under that order label. Orders to be used are listed in the reference book ID- 401. If family level identification is required, the insects should be further grouped together under the correct family label.

- Educational Box – One additional box (educational), based on the specific theme (see chart below), is required for grades 9-12, in addition to the insect collection boxes. This box can be created in any manner chosen (without the mounting, pinning or identifying restrictions specified above).

Judges evaluating collection exhibits should judge based on educational content, scientific accuracy, eye appeal and creativity.

## Monarch Butterfly Statement:

**Q:** Many have noticed the decrease in number of Monarch butterflies both in Indiana and throughout the country and wonder if and how Entomology at Purdue is responding. Are 4-H and youth still required to catch these endangered insects for their collection boxes?

**A:** Monarch butterflies are now officially on the threatened species list. While we know that collecting Monarch butterflies for 4-H collections or displays does not constitute a significant risk to their population when compared to the effects of climate change, pesticide contamination and habitat loss, capitalizing on this opportunity to discuss their decline is an excellent way to bring public focus to this important issue. We want our youth (and all IN citizens) to recognize the Monarch butterfly, understand its biology and be empathetic to its conservation.

Therefore, we have instituted the following update to our youth and 4H Entomology programs. Effective immediately, we no longer encourage students to 'collect' Monarch butterflies for exhibits, displays or 4-H insect collections. But, rather than simply removing the Monarch butterfly from the list of 150 insects that 4-H students are to recognize, we want to highlight it so that students really do learn to recognize them and understand their peril. After all, the more we are familiar with this species, the more apt we will be to assist and support the conservation of this iconic species.

Link to a recent article from our Department pertaining to Monarch butterflies

[\(https://www.purduelandscapereport.org/article/where-have-all-the-monarch-butterflies-gone/\)](https://www.purduelandscapereport.org/article/where-have-all-the-monarch-butterflies-gone/)

## Spotted Lanternfly Statement

**Q:** Are there any new changes to rules or directions for the 4H or FFA youth projects or competitions that students and coaches should look for?

**A:** To keep the youth Career Development (CDE judging) and 4-H collection projects current, it is important to occasionally add new insects to the list. Due to the invasion of a serious new insect pest throughout the Midwest called the Spotted Lanternfly, we have added it to the list of insects found in the "How to Make an Awesome insect Collection and (ID-401) and Who Let the Bugs Out (ID-402) extension resources. Please be aware that students are now expected to identify and understand its biology and behavior as well as its potential impact in Agriculture.

Indiana 4-H Youth Development partners with Purdue University academic departments to develop 4-H project guidelines. The Monarch butterfly and Spotted Lanternfly statements are provided by Dr. Timothy J. Gibb, Department of Entomology.



## Exhibit Class Guidelines:

### *Beginner (1<sup>st</sup>-3<sup>rd</sup> Year in Entomology)*

Create a collection based on the year in Entomology or an educational exhibit.

Year in Entomology	Collection Information	Total Boxes
1 <sup>st</sup> year	10 insects, identified and pinned on cards (ID 401A)	1
2 <sup>nd</sup> year	20 insects, mounted (pins or vials). Identify all insects by common name and identify five (5) to order. Include card ID 401B.	1
3 <sup>rd</sup> year	30 insects, mounted (pins or vials). Identify all insects by common name and identify 15 to order. Include ID 401C.	1

### *Intermediate (4<sup>th</sup>-6<sup>th</sup> Year in Entomology)*

Create a collection based on the year in Entomology or an educational exhibit.

Year in Entomology	Collection Information	Total Boxes
4 <sup>th</sup> year	40 insects, exhibit a minimum of 6 orders, mounted (pins or vials). Identify all insects by common name and order. Include ID 401D.	2
5 <sup>th</sup> year	50 insects, exhibit a minimum of 8 orders, mounted (pins or vials). Identify all insects by common name and order. Identify ten (10) to family. Include card ID 401E.	2
6 <sup>th</sup> year	60 insects, exhibit a minimum of 10 orders, mounted (pins or vials). Identify all insects by common name and order. Identify 30 to family. Include card ID 401F.	2

### *Advanced (7<sup>th</sup>-10<sup>th</sup> Year in Entomology)*

Create a collection based on the year in Entomology or an educational exhibit. Advanced level insect collections are to also include an education box, for a total of four boxes. Advanced level youth may instead create an independent study topic of choice.

Year in Entomology	Collection Information	Total Boxes
7 <sup>th</sup> year	70 insects, exhibit a minimum of 12 orders, mounted (pins or vials). Identify all insects by common name, order, and family. One educational box, theme: insect behavior. Include card ID 401I. (1-3	3

	collection boxes plus 1 educational box*). Place ID 401I in first collection box only. Card ID 401I download	
8 <sup>th</sup> year	80 insects, exhibit a minimum of 14 orders, mounted (pins or vials). Identify all insects by common name, order, and family. One educational box, theme: insect pest management. Include card ID 401I. (1-3 collection boxes plus 1 educational box*). Place ID 401I in first collection box only. Card ID 401I download	3
9 <sup>th</sup> year	90 insects, exhibit a minimum of 16 orders, mounted (pins or vials). Identify all insects by common name, order, and family. One educational box, theme: insects in the environment. Include card ID 401I. (1-3 collection boxes plus 1 educational box*). Place ID 401I in first collection box only. Card ID 401I download	3
10 <sup>th</sup> year	100 insects, exhibit a minimum of 18 orders, mounted (pins or vials). Identify all insects by common name, order, and family. One educational box, theme: benefits of insects. Include card ID 401I. (1-3 collection boxes plus 1 educational box*). Place ID 401I in first collection box only. Card ID 401I download	3



## Project Title: Floriculture

### Description:

Youth will learn basic information and skills needed to grow healthy plants and flowers as well as floral design techniques.

### State Fair Entries:

8 floral exhibits per county, 2 per level

4 educational exhibits per county, 1 per level

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Floral arrangements can be constructed using fresh flowers and greenery grown yourself or purchased, flowers and greenery dried yourself or purchased, or artificial flowers or greenery.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Level A (grades 3-4 suggested)*

Floral Option - Create a simple bud vase (1-3 stems of main flower plus appropriate filler and/or greenery) or simple round arrangement (small, compact round cluster of flowers plus appropriate filler and/or greenery).

Educational Display Option – Create a poster, notebook or display about one of the following:

1. Chronicle your work in your flower garden (planning, planting, care, harvest, arrangement made with your flowers)
2. Describe how you planned or designed your garden, including how you chose the kinds of flowers.

3. Explain how you harvested your flowers, cared for them, and used them in an arrangement.
4. Explore and explain: pollination - what it is, why important, different ways it occurs or transplanting - what, how, things to watch out for; or role of insects with flowers (good, bad or both).
5. Explore and explain seed germination.
6. Explore and explain how to care for a 'sick' plant.
7. Report on interview with a floriculture professional (what do they do, types of jobs, type of training, hours worked, etc.)
8. Describe an experiment you did and the results.
9. Describe a community service project you did related to your flowers project.
10. Another similar activity.

### *Level B (grades 5-6 suggested)*

Floral Option – Create a mixed planter that includes 3 or more kinds of plants, make an item from dried plants, or display a house plant (flowering or non-flowering) you've grown.

Educational Display Option – Create a poster, notebook or display about one of the following:

1. Report how you harvested your flowers and/or herbs, cared for them, dried them, and used them.
2. Explore and explain: insects and your flowers and/or herbs.
3. Explore and explain: starting seeds indoors -- the process and pros and cons.
4. Explore and explain: perennials -- what are they, how are they used, benefits or drawbacks.
5. Investigate and describe a butterfly garden -- what types of plants, benefits to insects and butterflies, etc.
6. Describe how you planned or designed your garden, including how you chose the kinds of plants, any problems, successes.
7. Describe your houseplant - how you cared for, transplanted to larger pot, any problems, or successes.
8. Explore and explain: plant biology -- form and function, growth, photosynthesis, etc.
9. Explore and explain: how to grow plants indoors -- things to consider, common problems and solutions.
10. Explore and explain: environmental effects related to plants (such as light, water, soil, or temperature).
11. Describe an experiment you did and the results.
12. Explore and explain topics from "Imagine That" -- plants around the world, information about different cultural uses of plants, different ways you used your plants/herbs/flowers.
13. Another similar activity.

### *Level C (grades 7-9 suggested)*

Floral Option – Create a terrarium, combination or European planter (3 or more kinds of plants), corsage, boutonniere, or specialty arrangement in a container (using dried flowers, roses, or lilies as the primary content).

Educational Display Option – Create a poster, notebook or display about one of the following:

1. Explore and explain: vegetative propagation -- how to, different types, problems and solutions, different uses of.

2. Explore and explain: plant nutrients -- what are they, why does the plant need them, what happens if the plant has too much or too little, planters or containers vs. garden.
3. Investigate the design of multiple plant containers -- how to, things to consider, selecting plant materials, uses of.
4. Describe how you created your corsage or boutonnieres; or dried arrangement. Be sure to include appropriate information on design principles and how they are used to create your arrangement.
5. Explore and explain: floral tools and materials (how to use, what they are, care of tools, different uses of a tool or material).
6. Explore and explain: preserving cut flowers -- how, problems, uses of and/or diseases related to cut flowers.
7. Illustrate, explore and explain how you dry flowers or other plant materials and/or describe different methods and/or how, why use them.
8. Explore and explain: medicinal uses and toxicity of fresh and dried flowers and plants.
9. Describe an experiment you did and the results.
10. Describe a career exploration activity you did, such as job shadow, interview with a professional.
11. Describe a community service activity you did related to your flowers project -- what you did, why, results, etc.
12. Another similar activity.

### *Level D (grades 10-12 suggested)*

Floral Option – Create a seasonal arrangement, modern or contemporary arrangement, bridal bouquet, special occasion centerpiece, or plant you have propagated and grown yourself.

Educational Display Option – Create a poster, notebook or display about one of the following:

1. Describe how you created your arrangement, include information on the design principles utilized.
2. Explore and explain how you utilize different flowers to make a similar style arrangement for different seasons (tulips in spring, mums in fall, etc.) or how to utilize similar flowers to make different styles of arrangements.
3. Explore and explain: the cost of arrangement and/or a cost comparison with flowers (different types flowers, different time year, etc.).
4. Explore and explain: forcing flowers (bulbs, branches, etc.).
5. Explore and explain: marketing in the floral industry (large or small business) and/ or a market survey and results, and how they can benefit the floral industry.
6. Explore and explain: how to start a business related to the floral industry and may include a business plan.
7. Explore and explain the origins of flowers and/or the floriculture industry around the world.
8. Explore and explain: tissue culture, biotechnology, or traditional breeding of new flower types -- what are they, how are they used, pros and cons.
9. Explore and explain: be a plant detective -- what kinds of problems might you have in growing and caring for flowers, and how to solve.
10. Describe an experiment you did and the results.
11. Describe a community service activity you did related to your flowers project: how, why, results.
12. Another similar activity.





## Project Title: Foods, Baked

### Description:

The foods project teaches basic baking, preservation and nutrition education skills.

### State Fair Entries:

- 2 Level A entries per county.
- 2 Level B entries per county.
- 3 Level C entries per county.
- 3 Level D entries per county.

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

### Purdue Extension Food Safety Policy (revised 10/2022):

**For Food Competitions:** Fillings, frostings, glazes, and meringues are not permitted to contain cream cheese, sour cream, heavy cream, or whipped cream if they are not fully cooked/baked. These items are allowed as ingredients in food products IF the final product is cooked/baked. Additionally, raw milk, raw milk products or uncooked eggs/egg whites are not permitted. Eggs/egg whites that have been cooked to 160°F (i.e. pasteurized **or** included as part of a batter and baked) are acceptable. No home- canned fruits, vegetables, or meats are permitted as ingredients in food products.

Foods should be transported to the competition in a way that minimizes contamination and maintains the quality of the food (i.e. foods that are judged as frozen should remain frozen at all times).

Recipes must be provided that identifies all ingredients that were used in each part of the product. Any ingredient that could be a potential allergen must be clearly identified. Potential food allergens include, but are not limited to, milk, eggs, peanuts, tree nuts, fish, crustacean shellfish, wheat, soy and sesame. Each food product must be labeled with the following information:

- Name
- Date the food product was made

*Contestants should carefully wash their hands and make sure that their hands do not have any open cuts before preparing foods. If cuts are present, the wound should be bandaged and a single use food service glove worn on the hand during all stages of food production. Contestants should not be preparing food exhibits for competition within 48 hours of recovering from any illness. People experiencing symptoms of vomiting, diarrhea, fever, and/or jaundice should not be allowed to prepare food.*

*Judges and individuals who will consume products from county and/or state competitions should be informed that they are at risk for foodborne illness since the established policy cannot guarantee that an entry has been properly prepared or handled before, during or following the competition. The food products for competitions are home produced and processed and the production area is not inspected by the Indiana Department of Health. Tasting of a food product is solely at the discretion of the judge and consumers. Judges are **NOT** to taste any home preserved foods such as low-acid or acidified foods like green beans, tomatoes or tomato products, jams/jellies/fruit preserves or fermented products produced in the home.*

Baked food products may be from a boxed mix following the instructions, a boxed mix with added ingredients, or ingredients combined from scratch. Youth are to place their name, county and club on the bottom side of their plate, pan or other container and the official entry tag provided will be placed with the exhibit.

A completed recipe card is to be submitted with each exhibit. Recipe cards are for judging purposes only and will not be returned to the exhibitor. Laminating, wrapping the recipe card in plastic, or placing it in a clear plastic bag is optional. Since it is illegal in the State of Indiana for youth under the age of 21 to purchase or consume alcoholic beverages, 4-H members are to use recipes that do not include an alcoholic beverage as an ingredient. A suitable non-alcoholic or imitation product may be substituted.

Baked food products should be covered during transport and displayed on a paper or foam plate, or another type of disposable container. Pies, casseroles and other similar items are to be baked in a disposable pan. Cakes and sticky items may be displayed on a cardboard strong enough to support the item and covered in foil, plastic, wax paper, or similar substance.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

Perishable baked exhibits entered for state fair competition will not be displayed and instead will be donated to a central Indiana homeless shelter.

## Exhibit Class Guidelines:

### *Level A (grades 3-4 suggested)*

Choose one or more of the baked products below, or a similar baked product of choice. It is suggested a participant choose a different option each year, but this is not a requirement. Exhibits entered at state fair will be donated to local homeless shelters after being judged and not displayed.

- Three uniced snack sized cookies.
- Three standard sized unlined muffins.



- Three standard sized unlined muffins containing an ingredient that is a source of Vitamin A or C.
- Three snack sized granola bars.
- Three snack sized brownies or blondies.
- An educational poster, notebook or display about a food or nutrition topic of choice that is age/grade appropriate.
- Any other similar baked item.

### *Level B (grades 5-6 suggested)*

Choose one or more of the baked products below, or a similar baked product of choice. It is suggested a participant choose a different option each year, but this is not a requirement. Exhibits entered at state fair will be donated to local homeless shelters after being judged and not displayed.

- A single layer cake without frosting.
- A single layer reduced-fat cake without frosting. Reduce the amount of fat in the recipe by using a fruit puree or baby food fruit product that does not contain yogurt.
- A standard loaf-sized quick bread.
- A standard loaf-sized quick bread containing an ingredient that is a source of Vitamin A or C.
- A coffee-cake.
- A coffee-cake containing an ingredient that is a source of Vitamin A or C.
- Three biscuits or scones that are plain, sweet or savory.
- Three biscuits or scones that are plain, sweet or savory using a whole grain flour mixture.
- Three biscuits or scones that are plain, sweet or savory containing an ingredient that is a source of Vitamin A or C.
- Three no-yeast, any shape pretzels (shaped, stick or nugget).
- Three no-yeast, any shape pretzel with a whole grain flour mixture (shaped, stick or nugget).
- Three no-yeast breadsticks.
- Three no-yeast cinnamon rolls or other flavored roll without icing or glaze.
- A no-yeast sweet bread without icing or glaze.
- An educational poster, notebook or display about a food or nutrition topic of choice that is age/grade appropriate.
- Any other similar baked item.

### *Level C (grades 7-9 suggested)*

Choose one or more of the baked products below, or a similar baked product of choice. It is suggested a participant choose a different option each year, but this is not a requirement. Exhibits entered at state fair will be donated to local homeless shelters after being judged and not displayed.

- Three yeast bread sticks or yeast rolls (any shape, medium size – not a sweet roll)
- Three (3) yeast bread sticks or yeast rolls (any shape, medium size - not a sweet roll), using a whole grain flour mixture. Participants are expected to learn how to knead bread dough by hand and allow it to rise appropriately. It is NOT acceptable to use a home bread maker.
- A yeast bread loaf or braid. Participants are expected to learn how to knead bread dough by hand and allow it to rise appropriately. It is NOT acceptable to use a home breadmaker.
- A yeast bread (can be loaf, braid) using a whole grain flour mixture such as whole wheat, rye, oat bran, etc. Participants are expected to learn how to knead bread dough by hand and allow it to rise appropriately. It is NOT acceptable to use a home breadmaker.
- Homemade pizza using a yeast dough. Judges are not expecting this item to be presented hot

out of the oven.

- One package of an, invented healthy snack (such as a granola bar, popcornsnack, trail mix, etc.). Your snack must include at least 2 food groups from MyPlate. Exhibit must include your snack product and a separate folder containing a marketing plan with product name, recipe, how it will be packaged, a package design, where it will be sold and suggested selling price. Style your snack for a photo shoot and include the picture in your marketing plan. Label should include product name, date, quantity, and serving size.
- Prepare an entrée casserole that meets three MyPlate requirements for a meal. Use care when transporting to prevent spoilage. Judges are not expecting this casserole to be presented hot out of the oven.
- An educational poster, notebook or display about a food or nutrition topic of choice that is age/grade appropriate.
- Any similar baked item.

### *Level D (grades 10-12 suggested)*

Choose one or more of the baked products below, or a similar baked product of choice. It is suggested a participant choose a different option each year, but this is not a requirement. Exhibits entered at state fair will be donated to local homeless shelters after being judged and not displayed.

- A single or double crust baked fruit pie (no graham cracker crust). (Note: Custards, cream, cream cheese frosting and fillings, and raw egg white frosting are not acceptable in an exhibit because they are highly perishable when left at room temperatures.)
- A baked food product for a catered meal or special event in which organizers have requested low fat and/or reduced sugar items. Exhibit will include your food product and a notebook outlining how this product is to be used at the event, menu, supplies to buy, preparation schedule, equipment, table layout, etc. A table display is optional.
- Select a condition in which people have to specifically modify their eating habits (diabetes, heart disease, Celiac disease, food allergies, etc.) Prepare a baked food product appropriate for someone with this condition. Exhibit will include your food product and a notebook summarizing the condition or allergy, nutrition considerations involved with the condition, a description of your baked item, and an explanation of how it fits within the nutrition considerations. Make sure to note any ingredients that could cause an allergic reaction.
- Prepare an entrée casserole that meets four MyPlate requirements for a meal. Use care when transporting to prevent spoilage. Judges are not expecting this casserole to be presented hot out of the oven.
- An international or ethnic food of choice. This may be a cold or hot product. Use care when transporting to prevent spoilage. Judges are not expecting this product to be presented hot out of the oven.
- A specialty pastry.
- Create a baking mix and provide a sample of the baked product. Include an index card with instructions, wet ingredients needed, and baking instructions.
- An educational poster, notebook or display about a food or nutrition topic of choice that is age/grade appropriate.
- Any other similar baked item.



## Project Title: Foods, Preserved

### Description:

The foods project teaches basic baking, preservation and nutrition education skills.

### State Fair Entries:

- 2 Level A entries per county.
- 2 Level B entries per county.
- 3 Level C entries per county.
- 3 Level D entries per county.

### Exhibit Guidelines:

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Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Refer to the [Purdue Extension Food Preservation](#) web site for resources and Purdue Extension educators trained to answer food preservation questions.

### Purdue Extension Food Safety Policy (revised 10/2022):

***For Food Competitions:*** Fillings, frostings, glazes, and meringues are not permitted to contain cream cheese, sour cream, heavy cream, or whipped cream if they are not fully cooked/baked. These items are allowed as ingredients in food products IF the final product is cooked/baked. Additionally, raw milk, raw milk products or uncooked eggs/egg whites are not permitted. Eggs/egg whites that have been cooked to 160°F (i.e. pasteurized **or** included as part of a batter and baked) are acceptable. No home- canned fruits, vegetables, or meats are permitted as ingredients in food products.

*Foods should be transported to the competition in a way that minimizes contamination and maintains the quality of the food (i.e. foods that are judged as frozen should remain frozen at all times).*

Recipes must be provided that identifies all ingredients that were used in each part of the product. Any ingredient that could be a potential allergen must be clearly identified. Potential food allergens

include, but are not limited to, milk, eggs, peanuts, tree nuts, fish, crustacean shellfish, wheat, soy and sesame. Each food product must be labeled with the following information:

- Name
- Date the food product was made

*Contestants should carefully wash their hands and make sure that their hands do not have any open cuts before preparing foods. If cuts are present, the wound should be bandaged and a single use food service glove worn on the hand during all stages of food production. Contestants should not be preparing food exhibits for competition within 48 hours of recovering from any illness. People experiencing symptoms of vomiting, diarrhea, fever, and/or jaundice should not be allowed to prepare food.*

*Judges and individuals who will consume products from county and/or state competitions should be informed that they are at risk for foodborne illness since the established policy cannot guarantee that an entry has been properly prepared or handled before, during or following the competition. The food products for competitions are home produced and processed and the production area is not inspected by the Indiana Department of Health. Tasting of a food product is solely at the discretion of the judge and consumers. Judges are **NOT** to taste any home preserved foods such as low-acid or acidified foods like green beans, tomatoes or tomato products, jams/jellies/fruit preserves or fermented products produced in the home.*

A completed recipe card is to be submitted with each exhibit. Recipe cards are for judging purposes only and will not be returned to the exhibitor. Laminating, wrapping the recipe card in plastic, or placing it in a clear plastic bag is optional. Since it is illegal in the State of Indiana for youth under the age of 21 to purchase or consume alcoholic beverages, 4-H members are to use recipes that do not include an alcoholic beverage as an ingredient. A suitable non-alcoholic or imitation product may be substituted.

Preserved food products should be displayed in an appropriate container, preferably disposable. Containers will not be returned to the exhibitor.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

Frozen exhibits entered for state fair competition will not be displayed and instead will be donated to a central Indiana homeless shelter. Home-canned exhibits will be displayed but will be disposed at the state fair's conclusion.

## Exhibit Class Guidelines:

### *Level A (grades 3-4 suggested)*

Choose one or more of the preserved products below, or a similar preserved product of choice. It is suggested a participant choose a different option each year, but this is not a requirement. Exhibits entered at state fair will be donated to local homeless shelters and not displayed.

- A package of 3 baked or unbaked, snack-sized (approximately 2"-3" individual size) frozen cookies. Display in freezer bag or freezer container. (NOTE: Freezer containers will not be returned.) Include index card with recipe and instructions for defrosting or baking. Label with name of product, quantity, and date frozen.
- One package of frozen berries. Display in freezer bag or freezer container. (NOTE: Freezer containers will not be returned.) Include index card with recipe and instructions for cooking or

- defrosting. Label with name of product, quantity, and date frozen.
- One package of dehydrated fruit or vegetable. Display in an appropriate bag or container. Include index card with recipe and instructions for cooking or defrosting. Label with name of product, quantity, and date dehydrated.
- An educational poster, notebook or display about a food or nutrition topic of choice that is age/grade appropriate.
- Any other similar preserved item.

### *Level B (grades 5-6 suggested)*

Choose one or more of the preserved products below, or a similar preserved product of choice. It is suggested a participant choose a different option each year, but this is not a requirement. Exhibits entered at state fair will be donated to local homeless shelters and not displayed.

- One uncooked frozen mini-pizza using whole-grain pita bread, English muffin, bagel, or already prepared crust (no larger than 7" in diameter) with toppings of your choice. Include at least 4 MyPlate food groups on your pizza. Meat toppings such as hamburger, sausage, bacon, etc. must be cooked. Display on covered cardboard inside freezer bag. Include index card with recipe and instructions for cooking. Label with name of product, quantity, and date frozen.
- One package of any frozen vegetable or combination vegetables. Display in freezer bag or freezer container. (NOTE: Freezer containers will not be returned.) Include index card with instructions for defrosting and cooking. Label with name of product, quantity, and date frozen.
- One container of frozen fruit or vegetable juice. Include index card with instructions for defrosting and cooking. Label with name of product, quantity, and date frozen.
- One container of frozen soup. Include index card with recipe and instructions for defrosting and cooking. Label with name of product, quantity, and date frozen.
- A frozen ready-to-eat breakfast sandwich, burrito or similar item. Display on covered cardboard inside freezer bag. Include index card with recipe and instructions for cooking. Label with name of product, quantity, and date frozen.
- An educational poster, notebook or display about a food or nutrition topic of choice that is age/grade appropriate.
- Any other similar preserved item.

### *Level C (grades 7-9 suggested)*

Choose one or more of the preserved products below, or a similar preserved product of choice. It is suggested a participant choose a different option each year, but this is not a requirement. Exhibits entered at state fair will be donated to local homeless shelters and not displayed.

- One (1) container of freezer jam. Include index card with recipe and instructions for storing. Label with name of product, quantity, and date frozen.
- One jar of a canned tomato product using the Hot Pack Method for a boiling water bath canner, such as tomato juice, catsup, barbecue sauce, or salsa. Include index card with recipe and instructions for cooking or using the product. Label with name of product, quantity, and date canned. Canned products must have the ring on the jar top to protect the seal. **Note: Only food preservation products made using USDA approved recipes and techniques are acceptable.**
- One jar of a canned pickled product or canned pickles. Include index card with recipe, processing, and storage instructions. (Products using a fancy pack are not accepted.) Label with name of product, quantity, and date canned. Canned products must have the ring on the jar top to protect the seal. **Note: Only food preservation products made using USDA**

***approved recipes and techniques are acceptable.***

- Frozen yeast dough (bread loaf, roll balls, sticks, pizza, etc.). Include index card with recipe and instructions for defrosting and cooking. Label with name of product, quantity, and date frozen.
- An educational poster, notebook or display about a food or nutrition topic of choice that is age/grade appropriate.
- Any similar preserved item.

## ***Level D (grades 10-12 suggested)***

Choose one or more of the preserved products below, or a similar preserved product of choice. It is suggested a participant choose a different option each year, but this is not a requirement. Exhibits entered at state fair will be donated to local homeless shelters and not displayed.

- One jar of pressure canned vegetables, meat or combination product, such as soup, stew, spaghetti sauce with meat, etc. Include index card with recipe and instructions for cooking or using the product. (Products using a fancy pack are not accepted.) Label with name of product, quantity, and date canned. Canned products must have the ring on the jar top to protect the seal. ***Note: Only food preservation products made using USDA approved recipes and techniques are acceptable.***
- One package of a combination food frozen entree in freezer container. The combination food should contain 3 food groups from MyPlate. Exhibit should include an index card with recipe and instructions for reheating. Display in disposable containers. No containers will be returned. Label with name of product, quantity, and date frozen.
- A jar of cooked jam or a reduced-sugar fruit spread. Include recipe card. Label with name of product, quantity, and date made. ***Note: Only food preservation products made using USDA approved recipes and techniques are acceptable.***
- One container of a thaw and eat frozen prepared appetizer. Include index card with recipe and instructions for defrosting. Label with name of product, quantity, and date frozen.
- One container of a thaw and eat frozen prepared dessert. Include index card with recipe and instructions for defrosting. Label with name of product, quantity, and date frozen.
- An educational poster, notebook or display about a food or nutrition topic of choice that is age/grade appropriate.
- Any other similar preserved item.



## Project Title: Forestry

### Description:

This project teaches youth natural resources and forestry related skills.

### State Fair Entries:

3 per county; one per level

### Exhibit Guidelines:

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Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any forestry topic of choice that is age/grade appropriate.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any forestry topic of choice that is age/grade appropriate.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any forestry topic of choice that is age/grade appropriate, prepare a herbarium collection that contains at least 25 native Indiana forest leaves, or prepare a herbarium collection that contains at least 25 native Indiana forest shrubs. Youth can also design and complete an independent study activity.

Herbarium Collections - Collect 25 terminal twigs and at least two leaves, if space allows (only one compound leaf is required), from native forest trees. Mount the specimens on 11 1/2" x 16 1/2" paper. One leaf on the twig must be mounted to show the back side of the leaf. Label each sheet with the following: common name, scientific name, where collected, county where collected, date collected, name of collector, and specimen number. Cover each specimen. There are no specific references given for these exhibits. Youth are encouraged to use Extension publications, the Internet, books, and forest specialists when collecting and identifying specimens. The herbarium collection must be accessible to the judges. Do not cover it under the plastic that covers your poster. Youth may want to attach a folder or other holder over your poster to hold the mounted, covered specimens.





## Project Title: Garden

### Description:

Youth will learn about plant growth, soil nutrition, and management of insects and diseases related to fresh vegetable and herb production.

### State Fair Entries:

- 1 collection per member, unlimited number of county entries.
- 5 single vegetable entries per member, unlimited number of county entries.
- 3 herb entries per member, unlimited number of county entries.
- 1 potato tray entry per member, unlimited number of county entries.
- 1 tomato plate entry per member, unlimited number of county entries.
- 1 educational exhibit entry per county.

### Exhibit Guidelines:

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Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Refer to Suggested 4-H Garden Exhibits, 4-H 970-w, to learn about size, weight, and other suggested specifications.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

Vegetable exhibits entered for state fair competition will not be displayed and instead will be donated to a central Indiana food bank.

### Exhibit Class Guidelines:

#### *Level A (grades 3-4 suggested)*

Choose one or more options outlined below. All vegetable and herb exhibits must include common name and variety. Vegetable exhibits entered at state fair will be donated to local food banks and homeless shelters after being judged and not displayed.

### *Level B (grades 5-6 suggested)*

Choose one or more options outlined below. All vegetable and herb exhibits must include common name and variety. Vegetable exhibits entered at state fair will be donated to local food banks and homeless shelters after being judged and not displayed.

### *Level C (grades 7-9 suggested)*

Choose one or more options outlined below. All vegetable and herb exhibits must include common name and variety. Vegetable exhibits entered at state fair will be donated to local food banks and homeless shelters after being judged and not displayed.

### *Level D (grades 10-12 suggested)*

Choose one or more options outlined below. All vegetable and herb exhibits must include common name and variety. Vegetable exhibits entered at state fair will be donated to local food banks and homeless shelters after being judged and not displayed.

## Garden Collection Option

Create a 3-plate, 4-plate, or 5-plate collection display of vegetables you have grown and cared for from the single vegetable list. Display each vegetable on a disposable plate. Inclusion of flowers is optional.

## Single Vegetable Option

Display from the list below vegetables you have grown and cared for on a disposable plate.

Vegetable	Plated Display Description
Asparagus	Asparagus, 5 spears
Beans	Cowpea, black-eyed pea, southern pea, etc., 10 pods or 1/2 cup shelled
Beans	Snap, Green or Wax, 10 pods
Beans	Lima-large or small - 10 pods or 1/2 cup shelled
Beans	Navy, kidney, shell out, etc.-1/2 cup shelled
Beets	Round, flat, and long types, 3
Broccoli	Broccoli, 1 head
Broccoli raab	Broccoli raab, 3 heads
Brussels sprouts	Brussels sprouts, 5 heads
Cabbage	Chinese type (bok choy or pak choi), 1 head
Cabbage	Chinese type (napa cabbage), 1 head
Cabbage	Round, Flat or Pointed type, 1 head
Carrots	Carrots, 3
Cauliflower	Cauliflower, 1 head
Celery	Celery, 1 bunch
Chard	Chard, 10 bundled leaves
Collards	Collards, 10 bundled leaves
Corn	Sweet-yellow, white or bicolor, 3 ears
Cucumbers	Dill, Pickling, 3

Cucumbers	English or hothouse, 1
Cucumbers	Slicing with seeds, 3
Eggplant	Eggplant, 1
Kale	Kale, 10 bundled leaves
Kohlrabi	Kohlrabi, 3
Muskmelon	Muskmelon (cantaloupe), 1
Okra	Okra, 3 pods
Onions	Green, 5 onions in a bunch
Onions	Red, Yellow or White, 3
Parsnip	Parsnips, tops off, 3
Peas	Peas, edible pod such as snow peas ,10 pods
Peas	Peas, unshelled, 10 pods
Peppers	Bell type, 3
Peppers	Chili type, 3
Peppers	Serrano type, 3
Peppers	Banana/Long/Wax/Hungarian type, 3
Peppers	Pimiento type (red), 3
Peppers	Cayenne type, 3
Peppers	Jalapeno type, 3
Peppers	Cherry type, 3
Peppers	New Mexican, long green, Anaheim type, 3
Peppers	Ancho type, 3
Peppers	Tabasco type, 3
Peppers	Habanero type, 3
Potato	Potatoes, any color, 3
Pumpkin	Pumpkin, (other), 1
Pumpkin	Table, Canning, or Ornamental, 1
Radishes	Radishes, 5
Rhubarb	Rhubarb, 3 stalks bundled
Rutabaga	Rutabaga, 3
Spinach	Spinach, 10 bundled leaves
Squash	Banana, or other large winter squash type, 1
Squash	Buttercups, Turbans, 1
Squash	Butternut, 1
Squash	Cushaw, 1
Squash	Hubbards – blue, green or golden, 1
Squash	Scallops/Patty Pans, 1
Squash	Straight or crookneck – i.e. summer squash, 1
Squash	Acorn, 1
Squash	Zucchini or cocozelle, 1
Sweet Potato	Sweet potatoes, 3
Tomatillos	Tomatillos, 3
Tomato	Any tomato, 1
Turnips	Turnips, 3
Watermelon	Watermelon, 1
Any Other Vegetable	Any vegetable not listed above, include 1-3 specimens

## Herb Option

Display from the list below a single herb plant you have grown and cared for in an appropriate size pot that has a saucer bottom.

Herb Name and Description
Basil ( <i>Ocimum basilicum</i> ) "all edible types"
Catnip ( <i>Nepeta cataria</i> ) "all edible types"
Chamomile ( <i>Chamaemelum nobile</i> ) "all edible types"
Chives ( <i>Allium schoenoprasum</i> ) "all edible types"
Coriander or Cilantro ( <i>Coriandrum sativum</i> ) "all edible types"
Dill ( <i>Anethum graveolens</i> )
French tarragon ( <i>Artemisia dracunculus</i> )
Lavender ( <i>Lavendula</i> sp.) "all edible types"
Mint ( <i>Mentha</i> sp.) "all edible types"
Oregano ( <i>Origanum vulgare</i> )
Parsley ( <i>Petroselinum crispum</i> ) "all edible types"
Rosemary ( <i>Rosemarinus officinalis</i> )
Sage ( <i>Salvia officinalis</i> )
Sweet Marjoram ( <i>Origanum majorana</i> )
Thyme ( <i>Thymus vulgaris</i> ) "all edible types"
Any Other Herb

## Potato Tray Option

Display from the list below approximately 30 potatoes you have grown and cared for in a 12 1/2" x18" tray. A tray will be provided when checking-in potato exhibits at state fair.

Potato Description
Red (Norland, Triumph), etc.
Russett (Haig, Norgold, Superior), etc.
White, long type (Kennebec), etc.
White, oval type (Irish Cobbler), etc.
White, round type (Katahdin), etc.
Other (yellow, blue, etc.)

## Tomato Plate Option

Display from the list below tomatoes you have grown and cared for on a disposable plate.

Tomato Description
Pink or purple, 3
Red (for canning), 3
Red (for market), 3
Roma or paste type, 3
Intermediate type, 10
Small Cherry or Pear, 10
Yellow or orange, 3

## Educational Exhibit Option

Create an educational poster, notebook or display about any manual activity or on any gardening topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.



## Project Title: Geology

### Description:

Geology involves studying the earth's crust, its layers, and their history. Youth learn to identify Indiana rocks, minerals, and fossils.

### State Fair Entries:

3 per county; one per level

### Exhibit Guidelines:

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Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Specimens may also be displayed in a collection box no larger than 24"x18"x3", displayed horizontally.

You may purchase your specimens and may display rocks, fossils, and minerals. If you purchase a specimen, indicate when and where you purchased it and the location where you would expect to find the specimen. If you collect a specimen, indicate the county and township where you found it.

Posters and display boxes will be exhibited "standing up" at the Indiana State Fair. Therefore, you need to mount your specimens securely. Subject matter experts suggest the following methods: soaking 1/2 cotton ball in Elmer's glue, hot glue, or clear tub sealant. Place the cotton ball in your box and put your rock (or fossil or mineral) on the cotton ball and let sit. It will take 1-2 weeks for Elmer's glue to fully harden. Specimens mounted with Elmer's glue can be removed by soaking the cotton ball in water. Glue remaining on the rock may be brushed off with an old, damp toothbrush.

When exhibiting rocks show a fresh surface (recently cracked or broken surface) to help judges identify the rock.

Labels - Include the specific geographical location where you would expect to find any specimens as well as where you actually acquired it (found, purchased, etc.).

Do not identify your specimens any further than phylum and class. There is one exception to this for fossils which are identified to phylum OR class. Class should only be used for fossils of mollusks, backboned animals, and arthropods.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

## Exhibit Class Guidelines:

### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any geology topic of choice that is age/grade appropriate.

### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any geology topic of choice that is age/grade appropriate, or collection of 8-16 minerals and/or fossils.

### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any geology topic of choice that is age/grade appropriate, or collection of 15-25 minerals and/or fossils and/or jewel stones. Youth can also design and complete an independent study activity.



## Project Title: Health

### Description:

The 4-H Health project is designed for youth interested in basic first aid and healthy well-being, as well as those interested in pursuing a medical profession career.

### State Fair Entries:

3 exhibits per county; one per level.

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any health topic of choice that is age/grade appropriate. Another option is to create a family first aid kit, emergency kit, an emergency kit to take on a hiking, biking, skiing or similar trip, or another similar kit.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any health topic of choice that is age/grade appropriate. Another option is to create a personal nutrition kit to use when doing physical activity like chores, working out at the gym, hiking, biking, skiing, or another similar kit.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any health topic of choice that is age/grade appropriate. Another option is to create an activity or guide to help yourself or others become more aware of financial wellness, mental health, disease prevention, or other similar topic that promotes healthy habits. Youth can also design and complete an independent study activity.





## Project Title: Home Environment

### Description:

Youth will apply the principles of design to home design and decoration as well as learn about care of home furnishings.

### State Fair Entries:

6 per county; two per level.

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Choose one of the following options:

- Furniture Item and Notebook – create a wall hanging, storage organizer, a set of 3-5 accessory items or something similar for the home or similar activity.
- Design Board and Notebook – color a line drawing from your manual and create three color schemes, color a line drawing from your manual and demonstrate dominant and supportive color, or display a line drawing showing where furniture would be placed in the room or similar activity.
- Portfolio – Collect different color schemes, magazines showing different furniture designs, or magazines/photographs of formal vs informal balance, dominant and supportive colors, etc. or similar activity.

#### *Intermediate (grades 6-8 suggested)*

Choose one of the following options:

- Furniture Item and Notebook – refinish or repurpose a piece or set of furniture, storage unit, or display a collection of 3-5 similar home accessory items, or similar activity.
- Design Board and Notebook – create a line drawing for a room in your home showing furniture layout, accessory items and fixtures or similar activity.
- Portfolio – display a sample of three different types of wall treatment with explanation of each, three different floor treatments with explanation of each, an energy plan for your home, or similar activity.

## *Advanced (grades 9-12 suggested)*

Choose one of the following options:

- Furniture Item and Notebook – refinish or repurpose a piece or set of furniture, storage unit, or display a collection of 3-5 similar home accessory items, or similar activity.
- Design Board and Notebook – display a floor plan for any room of your house or the whole house or apartment, or similar activity.
- Portfolio –display a sample of three different lighting or window treatments with an explanation of each, interview an interior designer and prepare a report, a home energy saving proposal plan, or similar activity.

## Exhibit Categories:

### Furniture Item and Notebook

An actual piece of furniture accompanied by a standard notebook (3-ring binder) explaining the who, what, when, where, why, and how of the chosen project. We suggest including pictures showing where the item will be used. Also, we encourage 4-H members to include pictures of themselves doing the project, but this is not required. Always place your identification information in the notebook and on the furniture.

### Design Board and Notebook

Standard 22" x 28" poster, displayed horizontally with a firm backing. Design boards must be covered with plastic to protect and help hold items in place. An identification name tag must be attached in the lower right corner. The notebook is to help explain the who, what, when, where, why, and how of the chosen design. This can be a "before and after project" or "plan in the future" project.

### Portfolio

Standard notebook (3-ring binder). If 4-H members choose to do this option more than one year, we suggest that they keep the previous year's materials in the notebook. Place materials for the current year in the front, with the previous year's materials clearly marked or labeled at the back. Always place your identification information in the notebook.



# Project Title: Lawn and Garden Tractor Safety and Operator Skills

## Description:

The 4-H lawn and garden tractor and equipment program develops principles of engine operation, hydraulic systems, electrical systems, safe operation skills.

## State Fair Entries:

4 educational exhibits per county; one per level

3 junior and 3 senior driving contestants will qualify at the county level to compete at the area level contest. 3 junior and 3 senior driving contestants will qualify at the area level to compete at the state contest.

## Exhibit Guidelines:

All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Youth may exhibit in the operator skills option, educational exhibit option or both. Youth choosing to exhibit in the lawn and garden tractor, tractor, or zero-turn mower operator skills driving option must select one, but may be enrolled in all three projects.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

## Exhibit Class Guidelines:

### Educational Exhibit Option

#### *Level A (grades 3-4 suggested)*

Create an educational poster, notebook or display about any manual activity or on any lawn and garden tractor safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

#### *Level B (grades 5-6 suggested)*

Create an educational poster, notebook or display about any manual activity or on any lawn and garden tractor safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

### *Level C (grades 7-9 suggested)*

Create an educational poster, notebook or display about any manual activity or on any lawn and garden tractor safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

### *Level D (grades 10-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any lawn and garden tractor safety, maintenance, operating system or operation topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.

## **Operator Skills Option**

The operator skills component is an educational and training activity conducted by adult 4-H volunteers. A parent or guardian is encouraged to be present when their child is operating a lawn and garden tractor. The adult 4-H volunteer has the authority to deny a child the opportunity to participate in the operator skills option when it is deemed a child is unable to safely operate a lawn and garden tractor due to size, weight, or any other reason that could place the child and/or others in harm.

### *Junior (grades 3-7 suggested)*

Youth will demonstrate their operation skills by driving a lawn and garden tractor through an obstacle course as outlined in 4-H 84, Conducting 4-H Operator Safety Contests.

### *Senior (grades 8-12 suggested)*

Youth will demonstrate their operation skills by driving a lawn and garden tractor through an obstacle course as outlined in 4-H 84, Conducting 4-H Operator Safety Contests.



## Project Title: Leadership

### Description:

This project allows the opportunity to learn life skills that are important to be effective leaders of themselves and of groups.

### State Fair Entries:

No state fair entries.

### Exhibit Guidelines:

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Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any leadership topic of choice that is age/grade appropriate.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any leadership topic of choice that is age/grade appropriate.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any leadership topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.



## Project Title: Photography

### Description:

This project teaches youth how to take quality photographs with a camera or digital device.

### State Fair Entries:

- 2 beginner per county
- 3 intermediate per county
- 3 advanced per county

### Exhibit Guidelines:

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All images are to be original images taken by the 4-H member during the current program year. Captions are not recommended.

**Print board exhibits** are to include 10 photos mounted on a poster as described above, each no larger than 5"x7". Number each print 1-10. Prints may be a mix of digital and/or standard development. Create a title of choice for the print board exhibit. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

**Salon prints** are to be no larger than 11"x14", mounted on a standard 16"x20" salon mount, and displayed vertically. Salon prints are to be placed in a clear plastic sleeve and captions are not recommended. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Images may be taken with a film camera, digital camera, cell phone, or other electronic device. Replacing any pixels of the original digital image is to be entered in the **creative/experimental** category. This includes, but not limited to, using artificial intelligence (AI), any erasing tool, healing tool, patch tool, or any tool that replaces any of the original pixels. Creative/experimental exhibits must include the original photo on the back side of the board, a description of how the image was altered, and equipment/software used to alter the image.

Editing photos such as cropping, color adjustment, and other enhancements are considered to be part of the normal photography educational learning process and are permissible. So judges can better evaluate a photography exhibit, the 4-H member is asked to attach to the back of their salon or print board exhibit the make and model of camera used and a description of any editing.

A photo that has been modified to change the original intent, meaning or story captured should be entered in the creative or experimental class. Photos exhibited as creative or experimental are to attach to the back of their exhibit the make and model of camera used, software or other tools used to

change the photo, a description of how the photo was changed, and copy of the original photo before editing.

Sepia tone photographs (mono chromatic) are to be entered as black and white photos.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

## Exhibit Class Guidelines:

### *Beginner (grades 3-5 suggested)*

Choose one or more of the following exhibits:

- Black and White Print Board
- Color Print Board
- Black and White Salon Print
- Color Salon Print
- Creative/Experimental Salon Print

### *Intermediate (grades 6-8 suggested)*

Choose one or more of the following exhibits:

- Black and White Print Board
- Color Print Board
- Black and White Salon Print
- Color Salon Print
- Creative/Experimental Salon Print

### *Advanced (grades 9-12 suggested)*

Choose one or more of the following exhibits:

- Black and White Print Board
- Color Print Board
- Black and White Salon Print
- Color Salon Print
- Creative/Experimental Salon Print



## Project Title: Shooting Sports

### Description:

The 4-H shooting sports project teaches safe operation of firearms and archery equipment.

### State Fair Entries:

3 per county; one per level

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Live ammunition is not allowed to be exhibited (no powder or primer). Firearms or ready to shoot bows are not allowed to be exhibited. Unstrung bows are permissible.

An arrow with its arrowhead attached must be displayed in a secure case. An arrowhead without the arrow attached must be displayed in a secure case. An arrow may be displayed unsecured if its arrowhead is removed. Modern broadhead arrows are not allowed to be exhibited.

Displays involving firearms or bows may be exhibited as a photographic display on a poster or in a notebook following grade level guidelines. Handmade items must include information explaining how the item was made and its intended use. Photos are encouraged.

Some county 4-H programs offer in-person shooting instruction, depending on facilities. Disciplines include archery, rifle, shotgun, muzzleloader and pistol. In-person instruction in any of these disciplines must be led by a 4-H certified instructor. While some counties provide an option to exhibit at the county level, there is no state fair exhibit in these specific disciplines. Contact your county 4-H educator to learn about discipline opportunities in your county.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*



Create an educational poster, notebook or display about a shooting sports topic of choice that is age/grade appropriate.

### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about a shooting sports topic of choice that is age/grade appropriate. Another option is to create an item to be used when developing shooting sports skills.

### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about a shooting sports topic of choice that is age/grade appropriate. Another option is to create an item to be used when developing shooting sports skills. Youth can also design and complete an independent study activity.



## Project Title: Small Engine

### Description:

The 4-H Small Engine project creates the education and hands-on opportunity for youth to learn all about engines.

### State Fair Entries:

3 per county; one per level.

### Exhibit Guidelines:

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Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

The actual small engine may be displayed if mounted on a stable base. For safety reasons, all fluids (fuel and oil) must be removed before taking the exhibit inside a building. A notebook is to accompany the engine display and include details and pictures of what was done to the engine.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any small engine topic of choice that is age/grade appropriate or a rebuilt small engine.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any small engine topic of choice that is age/grade appropriate or a rebuilt small engine.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any small engine topic of choice that is age/grade appropriate or a rebuilt small engine. Youth can also design and complete an independent study activity.



## Project Title: Soil and Water Science

### Description:

The soil and water science project teaches youth about soil, water, and environmental stewardship.

### State Fair Entries:

3 per county; one per level

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

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Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any soil and water topic of choice that is age/grade appropriate.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any soil and water topic of choice that is age/grade appropriate.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any soil and water topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.



## Project Title: Sportfishing

### Description:

The 4-H sportfishing project teaches safe habits and youth develop an appreciation for natural resources.

### State Fair Entries:

3 per county; one per level

### Exhibit Guidelines:

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Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about a sportfishing topic of choice that is age/grade appropriate.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about a sportfishing topic of choice that is age/grade appropriate. Another option is to create an item to be used when developing sportfishing skills.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about a sportfishing topic of choice that is age/grade appropriate. Another option is to create an item to be used when developing sportfishing skills. Youth can also design and complete an independent study activity.



# Project Title: Tractor Safety and Operator Skills

## Description:

The 4-H tractor and equipment program develops principles of engine operation, hydraulic systems, electrical systems, safe operation skills.

## State Fair Entries:

4 educational exhibits per county; one per level

3 junior and 3 senior driving contestants will qualify at the county level to compete at the area level contest. 3 junior and 3 senior driving contestants will qualify at the area level to compete at the state contest.

## Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

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Youth may exhibit in the operator skills option, educational exhibit option or both. Youth choosing to exhibit in the lawn and garden tractor, tractor, or zero-turn mower operator skills driving option must select one, but may be enrolled in all three projects.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

## Exhibit Class Guidelines:

### Educational Exhibit Option

#### *Level A (grades 3-4 suggested)*

Create an educational poster, notebook or display about any manual activity or on any tractor safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

#### *Level B (grades 5-6 suggested)*

Create an educational poster, notebook or display about any manual activity or on any tractor safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

### *Level C (grades 7-9 suggested)*

Create an educational poster, notebook or display about any manual activity or on any tractor safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

### *Level D (grades 10-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any tractor safety, maintenance, operating system or operation topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.

## **Operator Skills Option**

The operator skills component is an educational and training activity conducted by adult 4-H volunteers. A parent or guardian is encouraged to be present when their child is operating a tractor. The adult 4-H volunteer has the authority to deny a child the opportunity to participate in the operator skills option when it is deemed a child is unable to safely operate a tractor due to size, weight, or any other reason that could place the child and/or others in harm.

### *Junior (grades 3-7 suggested)*

Youth will demonstrate their operation skills by driving a tractor and wagon or trailer through an obstacle course as outlined in 4-H 84, Conducting 4-H Operator Safety Contests.

### *Senior (grades 8-12 suggested)*

Youth will demonstrate their operation skills by driving a tractor and wagon or trailer through an obstacle course as outlined in 4-H 84, Conducting 4-H Operator Safety Contests.



## Project Title: Veterinary Science

### Description:

This project provides a hands-on learning experience that helps youth learn more about the Veterinary Science profession.

### State Fair Entries:

3 per county; one per level.

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any veterinary science topic of choice that is age/grade appropriate.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any veterinary science topic of choice that is age/grade appropriate.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any veterinary science topic of choice that is age/grade appropriate. Youth may also choose to develop a teaching aid, develop a project in conjunction with a veterinarian and present a report about that project and its findings, or another report of your choosing.





## Project Title: Weather and Climate Science

### Description:

Youth will learn information about weather and climate science.

### State Fair Entries:

3 per county; one per level

### Exhibit Guidelines:

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Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any weather and climate topic of choice that is age/grade appropriate.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any weather and climate topic of choice that is age/grade appropriate.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any weather and climate topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.



## Project Title: Wildlife

### Description:

This project helps youth learn to identify wildlife, basic wildlife needs, and how wildlife interacts with other wildlife and people.

### State Fair Entries:

3 per county; one per level

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any wildlife topic of choice that is age/grade appropriate.

#### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any wildlife topic of choice that is age/grade appropriate.

#### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any wildlife topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.



## Project Title: Woodworking

### Description:

The 4-H woodworking project provides youth with educational information about wood and how it can be used to construct items.

### State Fair Entries:

4 per county; one per level.

### Exhibit Guidelines:

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

### Exhibit Class Guidelines:

#### *Level 1 (grades 3-4 suggested)*

Exhibit one article of choice made during the current 4-H program year demonstrating a minimum of five (5) techniques outlined in the [Indiana 4-H Woodworking Tools, Techniques and Skills Chart, 4-H 6875C-W](#). Exhibits may also include higher level techniques that have been mastered. Any higher level techniques will not be counted as part of the minimum five, but nevertheless will be evaluated for quality. A woodworking skills sheet is to be submitted with the exhibit for judging. Skills sheets are for judging purposes only and will not be returned to the exhibitor. Youth may also choose to create an educational poster, notebook or display about any manual activity or on any woodworking topic of choice that is age/grade appropriate.

#### *Level 2 (grades 5-6 suggested)*

Exhibit one article of choice made during the current 4-H program year demonstrating a minimum of five (5) techniques outlined in the [Indiana 4-H Woodworking Tools, Techniques and Skills Chart, 4-H 6875C-W](#). Exhibits may also include lower and/or higher level techniques that have been

mastered. Any lower/higher level techniques will not be counted as part of the minimum five, but nevertheless will be evaluated for quality. A woodworking skills sheet is to be submitted with the exhibit for judging. Skills sheets are for judging purposes only and will not be returned to the exhibitor. Youth may also choose to create an educational poster, notebook or display about any manual activity or on any woodworking topic of choice that is age/grade appropriate.

### *Level 3 (grades 7-9 suggested)*

Exhibit one article of choice made during the current 4-H program year demonstrating a minimum of five (5) techniques outlined in the [Indiana 4-H Woodworking Tools, Techniques and Skills Chart, 4-H 6875C-W](#). Exhibits may also include lower and/or higher level techniques that have been mastered. Any lower/higher level techniques will not be counted as part of the minimum five, but nevertheless will be evaluated for quality. A woodworking skills sheet is to be submitted with the exhibit for judging. Skills sheets are for judging purposes only and will not be returned to the exhibitor. Youth may also choose to create an educational poster, notebook or display about any manual activity or on any woodworking topic of choice that is age/grade appropriate.

### *Level 4 (grades 10-12 suggested)*

Exhibit one article of choice made during the current 4-H program year demonstrating a minimum of five (5) techniques outlined in the [Indiana 4-H Woodworking Tools, Techniques and Skills Chart, 4-H 6875C-W](#). Exhibits may also include lower level techniques that have been mastered. Any lower level techniques will not be counted as part of the minimum five, but nevertheless will be evaluated for quality. A woodworking skills sheet is to be submitted with the exhibit for judging. Skills sheets are for judging purposes only and will not be returned to the exhibitor. Youth may also choose to create an educational poster, notebook or display about any manual activity or on any woodworking topic of choice that is age/grade appropriate.



# Project Title: Zero-Turn Mower Safety and Operator Skills

## Description:

The 4-H zero-turn mower and equipment program develops principles of engine operation, hydraulic systems, electrical systems, safe operation skills.

## State Fair Entries:

4 educational exhibits per county; one per level

3 junior and 3 senior driving contestants will qualify at the county level to compete at the area level contest. 3 junior and 3 senior driving contestants will qualify at the area level to compete at the state contest.

## Exhibit Guidelines:

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Youth may exhibit in the operator skills option, educational exhibit option or both. Youth choosing to exhibit in the lawn and garden tractor, tractor, or zero-turn mower operator skills driving option must select one, but may be enrolled in all three projects.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

## Exhibit Class Guidelines:

### Educational Exhibit Option

#### *Level A (grades 3-4 suggested)*

Create an educational poster, notebook or display about any manual activity or on any zero-turn mower safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

### *Level B (grades 5-6 suggested)*

Create an educational poster, notebook or display about any manual activity or on any zero-turn mower safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

### *Level C (grades 7-9 suggested)*

Create an educational poster, notebook or display about any manual activity or on any zero-turn mower safety, maintenance, operating system or operation topic of choice that is age/grade appropriate.

### *Level D (grades 10-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any zero-turn mower safety, maintenance, operating system or operation topic of choice that is age/grade appropriate. Youth can also design and complete an independent study activity.

## **Operator Skills Option**

The operator skills component is an educational and training activity conducted by adult 4-H volunteers. A parent or guardian is encouraged to be present when their child is operating a zero-turn mower. The adult 4-H volunteer has the authority to deny a child the opportunity to participate in the operator skills option when it is deemed a child is unable to safely operate a zero-turn mower due to size, weight, or any other reason that could place the child and/or others in harm.

### *Junior (grades 3-7 suggested)*

Youth will demonstrate their operation skills by driving a zero-turn mower through an obstacle course as outlined in 4-H 84, Conducting 4-H Operator Safety Contests.

### *Senior (grades 8-12 suggested)*

Youth will demonstrate their operation skills by driving a zero-turn mower through an obstacle course as outlined in 4-H 84, Conducting 4-H Operator Safety Contests.