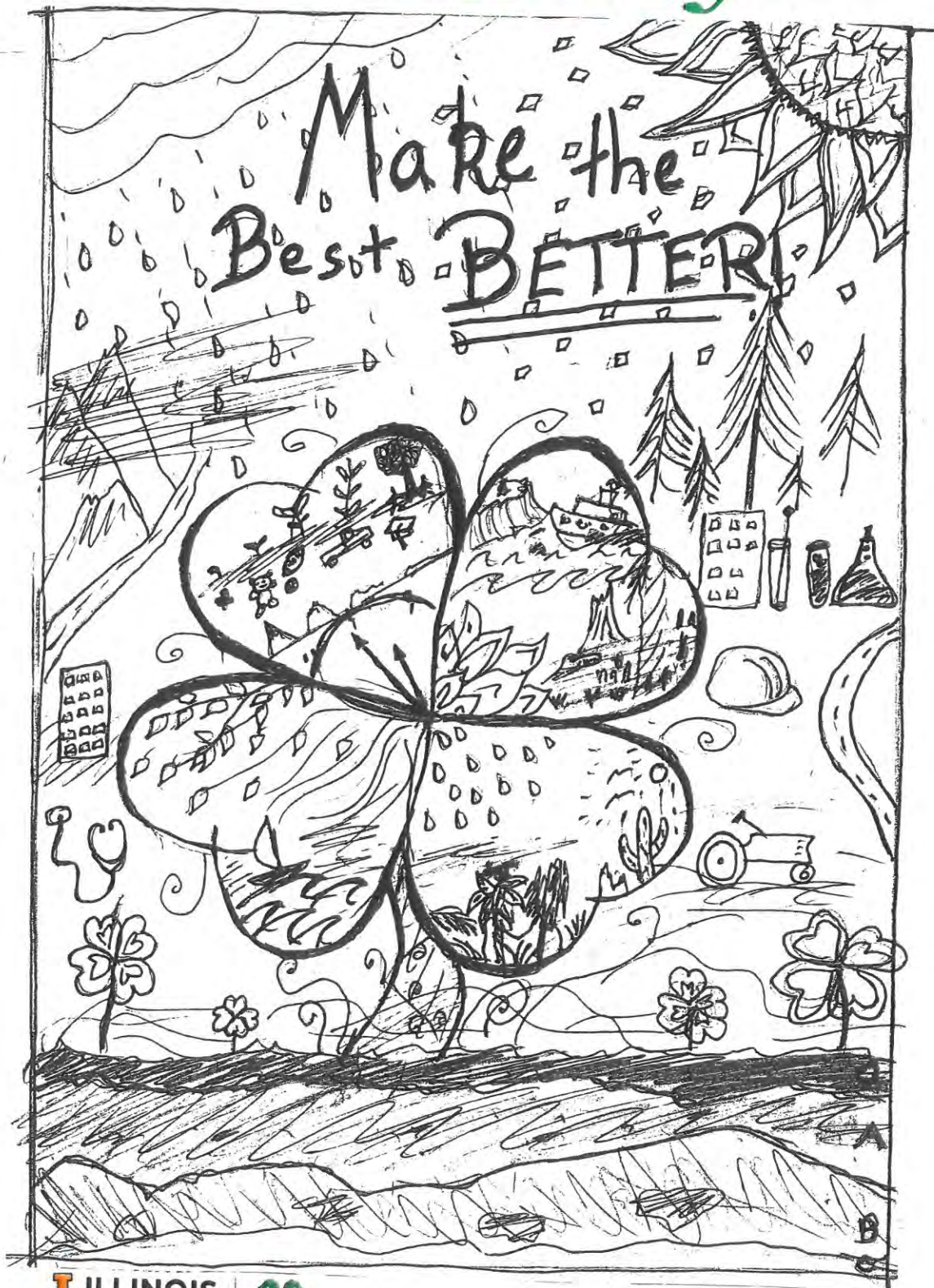


Williamson County



ILLINOIS
Extension
College of Agricultural, Consumer
& Environmental Sciences



2020 Show Book Cover Contest Winner:
Gabiella Burkett, Little Egypt Homesteaders 4-H Club

Table of Contents

Schedule for 4-H shows.....	5
Policies and Procedures	6
4-H Show Tips	9
Projects	
Aerospace	11
Bicycle	12
Child Development.....	12
Civic Engagement	14
Clothing & Textiles	15
College & Career Readiness	19
Communications	20
Public Presentations.....	21
Computer Science	22
Consumer Education	24
Crops.....	25
Electricity	27
Entomology	28
Beekeeping	29
Exploratory	30
Collections.....	31
Do Your Own Thing	31
Family Heritage	31
Foods & Nutrition.....	32
Forestry.....	35
Geology.....	36
Health	38
Horticulture (Floriculture & Vegetable Gardening)	39
Intercultural	42
Interior Design	43
Leadership.....	45
Natural Resources	47
Photography	49
Plant & Soil.....	51
Robotics	52

Shooting Sports	54
Small Engines	56
Technologies(3-D printing / Drones).....	57
Theater Arts	60
Tractor	61
Veterinary Science.....	63
Video/Filmmaking	64
Visual Arts	65
Weather	70
Welding.....	71
Woodworking	72
Cloverbuds	73
Absentee Form	74
Premium Guide.....	75
Livestock Policies and Procedures	79
Auction Policies.....	80
2019 Livestock Health Requirements County	82
Animal Science.....	86
Beef.....	87
Cat	87
Dairy	88
Dog	88
Goats.....	89
Horse & Pony Policies and Procedures	90
Horse & Pony.....	91
Poultry	92
Rabbits	92
Small Pets.....	92
Sheep	93
Swine	93

2020

Williamson County Show Schedule

DATE:	TIME:	SHOW:	LOCATION:
April 16	6:00 pm	Performance Showcase Public Presentation	Scottsboro Baptist Church
June 18	6:00 pm	Small Animal Show Dog, Cat, Small Pets, Rabbit, Poultry	Williamson County Fairgrounds
June 27	1:30 pm	General Show	John A. Logan College
July 13	8:00 am 9:00 am 10:00 am 11:00 am 6:00 pm	Dairy Show Dairy Goat Show Meat Goat Show and Pygmy Goats Goat Wether Show Swine Show	Franklin County Fairgrounds
July 14	8:00 am 9:00 am 1:00 pm	Sheep Show Beef Show Steer Show	Franklin County Fairgrounds
August 15		State Fair Exhibition Day Unit #26 (Franklin, Jackson, Perry, Randolph, Williamson)	State Fairgrounds Springfield, IL

POLICIES AND PROCEDURES

1. 4-H is open to anyone regardless of race, creed, color, sex, or handicap who is eight years of age and who is not 19 by September 1, 2019.
2. Exhibitors must be currently enrolled as a 4-H member and have been at least 8 years old as of September 1, 2019. Parents and leaders should make provisions for the adequate care and supervision of exhibitors.
3. Illinois 4-H has a \$20 program fee for all 4-H Cloverbud, Community Club, and Special Interest Club members. This fee will be collected annually.
4. If a 4-H member needs a reasonable accommodation to participate, please contact the Local Extension Office before June 1, 2020. If a 4-H member needs a reasonable accommodation to participate in the State Fair, please contact the Illinois State 4-H Office at illinois4H@illinois.edu by August 1, 2020.
5. **The Illinois State Fair, State 4-H Office, and local University of Illinois Extension personnel or their assigned agents do not assume liability for loss, theft, or damage to any exhibit.**
6. Exhibits are open only to members of 4-H clubs and Spin clubs regularly organized under the direction of the University of Illinois.
7. 4-H members may enroll in 4-H projects at any time during the year but, in order to exhibit a project at the County Fair, the 4-H member must be enrolled in that project by **May 1** unless there is a special class held after that date, but before the Fair.
8. All “Do your own thing” projects must be approved by the Extension Office prior to enrolling in the project.
9. A 4-H member can exhibit in only those project areas in which he/she has enrolled in at the county Extension office. Premiums will be paid only on those projects in which the member has been properly enrolled, within the guidelines.
10. All 4-H members must be enrolled in a minimum of one project or approved course of study. Participation in 4-H exhibitions is optional on the part of the 4-H member. Project support materials are available on national, state, regional, and local levels.
11. A youth who enrolls in a 4-H club/group, in order to be eligible to show projects, must attend a total of five 4-H events in which three of them need to be their club 4-H meetings. Federation meetings, workshops, community service projects, and other approved activities may count towards the other 2 meetings. Youth who do not comply are not eligible to take part in 4-H exhibitions or receive 4-H premiums.

Project Specifications

12. **All entries must be products of the current 4-H year (September 1, 2019 - August 31, 2020).** The same product or speech that is selected at the county level must be the one exhibited at the State Fair, adjusted to State Fair class requirements. The exceptions include exhibits in the areas of Food & Nutrition (must be the same recipe), Crops (plant exhibits), Floriculture, and Vegetable Market Baskets/Plates. Modifications can be made to the original county exhibit to 1) meet State Fair class requirements, or 2) incorporate suggested improvements made by the local judge. Determination of exhibit eligibility rests solely with the University of Illinois Extension Assistant Dean and Director, 4-H and designated persons.

13. **Due to the nature of the conference judging process, exhibitors must be present with the exhibit that they have made/produced for judging at State Fair. Accommodations may be made for the County Fair- see policy number 14 below.**
14. County Policy on Absent Judging process. If the member is unable to show his/her exhibit, another 4-H member may show it for him/her as long as the Absentee Form accompanies the project and prior approval has been made through the Extension office prior to the show date. A non 4-H member is not permitted to show the exhibit. A non 4-H member will be disqualified. These exhibits will not be eligible for state fair. Livestock exhibitors must show to be eligible to sell, if there is a special circumstance please contact the Extension office and a decision will be made if someone else will be eligible to show for you.
15. Please choose a display size which is most appropriate for the exhibit you are bringing. Larger does not always mean better; use good judgment in creating your exhibit. Read individual project guidelines.
16. **Limited equipment will be provided for certain exhibits.** For Public Presentations, the following items will be available, **if requested in advance:** LCD projector, podium, projector screen, and extension cord. Exhibitors must furnish any additional equipment they feel is necessary to properly critique their exhibit (i.e. computer). Exhibitors should be aware that electrical outlets are not always located near judging locations and should take that into consideration when planning exhibits.
17. All members are responsible for exhibiting the correct article, information, etc. If a member is unclear as to the show requirements, they are responsible for seeking clarifications and instructions from their leader or the Extension Office prior to show day.
18. Exhibits illustrating inappropriate subject matter and/or graphics are not acceptable. The Staff reserve the right to not display exhibits deemed inappropriate for youth audiences. Items deemed potentially dangerous to fair-goers may be removed from the exhibit.

Show Awards

19. Judges are permitted to award ribbons and trophies at their discretion. Judges take into account the knowledge exhibited by the member, the appearance of the exhibit, as well as any project book work completed by the Exhibitor. Exhibitors who do not follow the exhibit class guidelines and requirements are ineligible to receive a Champion ribbon. The judge's decision is final unless it has been determined that an exhibitor has not followed the guidelines or rules for that exhibit class.
20. Each project is awarded either an A, B, or C rating and ribbon.
21. The 4-H member must meet the specific requirements listed in this book; otherwise, a 'C' rating may be given. Exhibits must be complete. Unfinished work will be penalized.
22. All awards are subject to change.
23. Outstanding exhibitors in State Fair eligible projects that meet State Fair project requirements will be awarded State Fair ribbons and State Fair Alternate ribbons at the judge's discretion.
24. Outstanding exhibitors in the following animal classes will receive Grand Champion trophies and Champion Reserve ribbons: beef, sheep, goat, horse, dairy, swine, cat, dog, poultry, rabbit and small pets. Unless donated funds allow for more.
25. All ribbons and trophies will be awarded at the judges' discretion. There must be at least 2 participants per class for Champion, Grand Champion, and/or Showmanship title(s) to be awarded. Champion ribbons and

trophies may not necessarily be given to State Fair delegates. This will be at the discretion of the judge.

26. A Showmanship gift will be awarded to the top outstanding exhibitor in the following animal science project areas: Beef, Goat, Sheep, Swine, Dairy, Rabbit, Poultry and Horse. These will only be awarded if two or more exhibitors show in a class. Additional prizes may be awarded if donations are received.
27. There is no limit to how many times a member can win a project trophy or Champion Ribbon in the same project.
28. 4-H members may attend State Fair in any project unit two consecutive years or more, unless their participation prevents another 4-H member from attending. Livestock, Public Speaking and Demonstrations are exempt from this rule.
29. **An individual 4-H'er may enter ONLY ONE exhibit per class in the 4-H Exhibit Division. Members will be paid for a maximum of 12 exhibits and no more than 3 exhibits in a project area.**
30. 4-H members will be paid for the projects that will pay the most in premium.
31. 4-H premiums are based upon the amount of money we are allotted from the Agriculture Premium Fund. Thus, the amount of money paid, as premiums may be different to what is printed in this handbook.

Tax Implications for Prizes, Gifts or Awards Program Participants (including minors) will be required to provide their social security number or foreign national tax ID number prior to receiving a prize, gift or award to ensure proper IRS reporting as required by law. This sensitive information is kept confidential and handled through security protected software (PEAR). Participants will not be eligible for prize, gift or award if social security or foreign national tax ID information is not provided.

Show Day Policies

32. Parents are not allowed in the show ring or judging area. Superintendents and show assistants will provide needed help.
33. No alcohol or tobacco is allowed at any 4-H function. Because our fairground also hosts the Jr. Fair, the Fair board has established a "No Smoking or Alcohol" rule within 15 feet of the barns or buildings.
34. No golf carts or any ATV's are allowed on the fairgrounds. Bicycles are restricted also, except for the bicycle show. They will be allowed in the camper area. This is for the safety of the 4-H members, their families and spectators. No dogs at the 4-H shows outside of the Small Pet Shows unless they are at your camping site.
35. 4-H members and their families who spend the week at the Fairgrounds during the 4-H Fair must notify the Extension Office of their intent to camp. Names, dates and type of vehicles will be kept on file at the Fair Office.

Please note: Because of the number of members enrolled and exhibit ratings varies each year, an "X" factor may be added to/or subtracted from the premium listed based on the actual state premium funds available. If you need a reasonable accommodation to participate in the 4-H Show (Fair), please contact the County Director, Lynn Heins, at the following phone number and/or address:

University of Illinois Extension – Jackson County, 402 Ava Rd, Murphysboro, IL, (618) 687-1727 at least two weeks prior to the event.

TIPS TO HELP YOU PREPARE TO SHOW YOUR PROJECT

STRESS

RELIEVERS

Getting ready for 4-H shows can create a lot of stress. Be prepared! Prepare yourself and your animal(s) to the best of your ability and 4-H fair days should be fun and less stressful.

START EARLY! Preparing the day before or the same day is good for a headache on your part.

READ and make sure you understand all rules, regulations, and requirements. Every question should be found in your project manual or 4-H handbook. Handbooks are very important to read and have a wealth of information. If you still don't understand or can't find the answer, ask your 4-H leaders, older 4-H members, or Extension staff for help.

UNDERSTANDING 4-H CONFERENCE JUDGING

Judging is a method used to determine how well a 4-H member meets the requirements set for their project. Age is factored in by the judge. For example, an eight year old is not expected to have the same abilities that a fourteen year old may have. 4-H projects are not compared but are evaluated independently. Review the expected standards for each project and be prepared to answer questions about your project that indicates to the judge that **YOU** completed the project and learned from doing the project. Practice by judging your own project. Have fun! Be polite and courteous on show day!

During conference judging, the judge will encourage you to talk about your project exhibit.

Judges are provided with score sheets to assist them in evaluating each project. Copies of the score sheets are available to review at the Extension Office upon request at any time.

You will be asked some questions about your exhibit so come prepared to tell what you were trying to do in your project (goals and objectives) and be able to describe the methods and processes used to produce the exhibit.

Read and follow the rules and requirements for your project carefully. Learn good sportsmanship.

Listen carefully to the judge so that you can accept constructive criticism and learn from it. Remember, judging comments can be helpful, but they are only one person's evaluation. Realize that people sometimes make mistakes.

A MESSAGE TO LEADERS AND PARENTS

The 4-H exhibit is not an end in itself nor does it measure all the learning that takes place in the 4-H project. The exhibit is only one measure of success. Self-recognition, self-satisfaction and the learning from completing the project are important rewards.

Discuss the purpose of judging with 4-H members & their parents:

- To evaluate the exhibit which is an example of the child's work
- To help each member see the process that s/he has made and put judging in perspective.

Help the child set realistic goals for him/herself according to his/her own age and experience.

Be sure that goals are in line with the child's age and experience. Recognize good work. Give constructive criticism.

Be familiar with the requirements or criteria of the 4-H project that is to be judged. Regardless of who does the judging there are some basic points to keep in mind:

- The development of young people is our first consideration in 4-H work.
- We are really concerned more about what the 4-H member learns than with the exhibit.
- Projects are a means to an end – not an end in themselves.
- No exhibit is so poorly done that it is not worthy of an encouraging comment.
- No exhibit is so well done that some improvement may not be made.

Judging is done according to quality standards. It is not a matter of personal whim or tastes. The standards are:

- High, but attainable.
- Appropriate to different age levels.
- Known by the 4-H members.

Projects are evaluated, not members. All completed projects meeting show requirements will receive a Blue, Red or White rating. Projects are evaluated independently, not compared.

Blue.....meets requirements

Red.....needs improvement

White.....needs much improvement

Stress that judging comments can be helpful, but they are only one person's evaluation.

In competition, avoid overemphasis of the winner. Help the child accept the results of the competition and realize that through his/her accomplishments everyone is a winner.

AEROSPACE Each county may send 2 entries total from 50130, 50131; and 1 entry from 50133.

Model Rocketry: (SF 50130)

(Open to youth in Aerospace 2, Aerospace 3, and Aerospace 4)

Exhibit one model rocket assembled or made by the member. The exhibit will be a static display. The model rocket should be in good flying condition. DO NOT include the rocket engine with your exhibit. The rockets will not be launched. Attach the printed directions for construction of the rocket if any were used.

Aerospace Display: (SF 50131)

(Open to youth in Aerospace 2, Aerospace 3, and Aerospace 4)

Prepare a display related to the aerospace project which does not fit in the model rocketry class. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Aerospace Ready4Life Challenge (SF 50133)

Open to 11- to 18-year-olds enrolled in any Aerospace project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Aerospace Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that

exhibits use Open Source Software and/or Hardware in the build.

BICYCLE (not eligible for state fair)

Bicycle 1

Exhibitors will draw three situations from a bag that relate to activities from Level 1 and discuss/explain all three with the judge. Situations may include: Selecting bicycle safety equipment; Demonstrate how to fit a helmet; Identify bike parts and their function; Selecting the right size bike; How to check bicycle tires, brakes and chains; Recognizing traffic signs and their meaning; General discussion of bicycling hazards; and Items to consider when planning a bike trip.

Bicycle 2

Exhibitors will draw three situations from a bag that relate to activities from Level 2 and discuss/explain all three with the judge. Situations may include: Factors to consider when choosing a bike; Comparing tire pressure, valve type and tread; Steps in fixing a flat tire; Steps to follow when cleaning, lubricating and replacing a bike chain; Evaluating the braking system on a bicycle; Factors to consider when mapping out a bike route; Rules for smart bike riding; and Planning a menu for an all-day bike ride.

Bicycle Ready4Life Challenge (not eligible for state fair)

Open to 11- to 18-year-olds enrolled in any Bicycle project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Bicycle Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

CHILD DEVELOPMENT

Each county may submit 1 entry from 50141

Child Development (SF 50141)

Exhibit one of the following class options

Child Development 1: Infants and Toddlers

Prepare a display focusing on any activity related to the child development project. Demonstrate the skills and knowledge you have gained through the child development project you studied. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. For safety reasons, exhibits cannot include glass, syringes with needles or any other sharp objects. Exhibit must include printed or electronic version of at least three completed activities from the manual.

Child Care 1: Infants and Toddlers

Prepare a display focusing on a topic related to child care of this age group such as selecting age appropriate activities, explaining child behavior, and/or recognizing safety concerns. Demonstrate the skills and knowledge you have gained through the child development project you studied. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. For safety reasons, exhibits cannot include glass, syringes with needles or any other sharp objects. Exhibit must include printed or electronic version of at least three completed activities from the manual.

Child Development Ready4Life Challenge (SF 50142)

Open to 11- to 18-year-olds enrolled in the Child Development project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Child Development Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogrammed to perform a different function other than what it was designed to do)
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.

- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

CIVIC ENGAGEMENT

Each county may submit 2 entries total from classes 50145, 50146, 50147; and 1 entry from 50149. **Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.**

Civic Engagement 1 (SF 50145)

Exhibit a display illustrating one of the following options: 1) personal information about yourself – who you are, things you like to do, things you are good at, your favorites; 2) your feelings and how you handle these feelings; 3) your family, their responsibilities, how you work together; **OR** 4) the Family Pedigree that may include family group pages. **Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.**

Civic Engagement 2 (SF 50146)

Exhibit a display illustrating one of the following options: 1) your neighborhood; 2) how you were a good neighbor or led a service project for your community; **OR** 3) a Citizenship Challenge that you helped organize and lead (see the project book for details). **Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.**

Civic Engagement 3 (SF 50147)

Exhibit a display illustrating one of the activities that you completed within your project as it relates to one of the following categories in the manual: 1) Government; 2) Business and Industry; 3) Transportation, Communication & Utilities; 4) Culture & Heritage; 5) Natural Resources & Environment; 6) Education; 7) Organizations within your community; 8) Tourism; **OR** 9) Support Systems within your community. **Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.**

Civic Engagement Ready4Life Challenge (SF 50149)

Open to 11- to 18-year-olds enrolled in any Citizenship project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Civic Engagement Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)

- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

Service Learning 1 (not eligible for state fair)

Exhibit a binder portfolio to reflect what the exhibitor accomplished in the four steps of service learning. If exhibitor has been enrolled in project for multiple years, the binder portfolio should include previous years' work. Use of page protectors is recommended.

Service Learning 2 (not eligible for state fair)

Exhibit a binder portfolio to reflect what the exhibitor accomplished in the four steps of service learning. If the exhibitor has been enrolled in the project for multiple years (including Service Learning 1), the binder portfolio should include the previous years' work. Use of page protectors is recommended.

Service Learning 3 (not eligible for state fair)

Exhibit a binder portfolio to reflect what the exhibitor accomplished in the four steps of service learning. If the exhibitor has been enrolled in the project for multiple years (including Service Learning 1 & 2), the binder portfolio should include the previous years' work. Use of page protectors is recommended.

CLOTHING & TEXTILES

Each county may submit 3 STEAM entries total from 50151 a-c, 50152 a-c, 50153 a-c; 2 shopping entries from 50154, 50155, 50156; and 1 Ready4Life entry from 50157.

All exhibits entered in the clothing and textiles area will be judged based on their construction and fit (if applicable). Exhibitors bringing garments should not wear their garments when they arrive for judging. The garment will be reviewed by the judges for construction first. Exhibitors will be asked to change into the garment as the second step of the judging process. If the garment was constructed for another individual, that individual must be present to wear the garment for the judge. (Only the exhibitor who made the garment is eligible for ribbon and premium.) Construction and appearance will both be considered during judging. If a pattern was used to make the item, the pattern instructions, either written or electronic, are to be included with the exhibit. Exhibit tags should be attached to the garment, not to the hanger.

Members wishing to exhibit knitted items should enroll in Visual Arts Fiber (if original) or Heritage Arts (if made from a pattern). Members who enroll in Clothing & Textiles with the intent of pursuing quilting can exhibit in the non-clothing exhibit category in STEAM Clothing 1—FUNdamentals. Quilts exhibited in the Clothing & Textiles area will be judged using a rubric that evaluates the sewing skills and construction of the item. All work on the quilt MUST be completed by the 4-H member. You cannot exhibit a quilt that was quilted by someone else. Quilts can be hand OR machine quilted as long as ALL work is completed by the exhibitor.

CLOTHING: STEAM

STEAM Clothing 1 – FUNdamentals (SF 50151a, 50151b, 50151c)

Exhibit one of the following in either the Non-Sewn, Sewn Non-Clothing, or Sewn Clothing exhibit divisions:

Non-Sewn Exhibits (SF 50151a) Exhibit one of the following:

- Clothing Portfolio – Complete at least three different samples/activities from Chapter 2 and/or Chapter 3 of the project manual. Examples of samples you might include: How Two Magically Become One, pages 85-86; No Fear of Fray, pages 93-95; Two Sides of the Moon, pages 97-99; On the Flip Side, pages

101-104; Basic Hand Sewing Skills, pages 106-108. The Portfolio should be placed in an 8 ½ x 11, 3 ring binder. Include an appropriate cover, dividers, and table of contents. NOTE – additional pages can be added each year but must be dated with the year. See pages 9-10 of project manual for portfolio formatting.

- Fabric Textile Scrapbook – Must include at least 5 different textile samples. Use Textile Information Cards template on page 41 in project manual to identify fabric swatches. Completed textile cards should be placed in an 8 ½ x 11, 3-ring binder. Include an appropriate cover. See project manual, pages 42-74, for fabric options and fabric science experiments.
- What's the Difference - What's the Price Point – Exhibit may include a notebook, poster, small display sharing a project comparison and price point. See activity, pages 118-120. Exhibit should include PHOTOS; NO actual PILLOWS.

Beginning Sewing Exhibits – exhibits in this class must be made from medium weight woven fabrics that will sew and press smoothly, flannel/fleece is acceptable. Solid color fabrics or those having an overall print are acceptable. NO PLAIDS, STRIPES, NAPPED or JERSEY KNIT. Patterns should be simple WITHOUT DARTS, SET-IN SLEEVES, and COLLARS. Raglan and loose flowing sleeves are acceptable.

Sewn Non-Clothing Exhibits (SF 50151b) Exhibit one of the following:

- Pillowcase
- Simple Pillow – no larger than 18" x 18"
- Bag/Purse – no zippers or button holes
- Other non-clothing item using skills learned in project manual

Sewn Clothing Exhibits (SF 50151c) Exhibit one of the following:

- Simple top
- Simple pants, shorts, or skirt – no zipper or button holes
- Simple Dress – no zipper or button holes
- Other – other wearable item using skills learned in project manual (apron, vest, etc.)

STEAM Clothing 2 – Simply Sewing: (SF 50152a, 50152b, 50152c)

Exhibit one of the following in either the Non-Sewn, Sewn Non-Clothing, or Sewn Clothing exhibit divisions:

Non-Sewn Exhibits (SF 50152a) Exhibit one of the following:

- Clothing Portfolio – Complete at least four different samples/activities from Chapters 2, 3 AND/OR 4 of the project manual. The Portfolio should be placed in an 8 ½ x 11, 3 ring binder. Include an appropriate cover, dividers, and table of contents. NOTE – this can be a continuation of a Portfolio created in STEAM Clothing 1. Additional pages can be added each year but must be dated with the year created. See project manual, pages 9-11 for portfolio formatting.
- Expanded Textile Science Scrapbook – Must include at least 10 different textile samples. Use Textile Information Cards template on page 39 in project manual to identify fabric swatches. Completed textile cards should be placed in an 8 ½ x 11, 3 ring binder. Include an appropriate cover. See Project, pages 40-82 for fabric science experiments.
- Design Basics – Understanding Design Principles – Exhibit should include a learning experience that demonstrates the design principles and elements involved when selecting fabric for clothing and accessories. See project manual, pages 17-20 for design suggestions.
- Entrepreneurial Sewing – Exhibit should highlight items you made for sale online. Create an exhibit that displays products you made and posted online. Refer to the project manual, pages 161-167 for information on how to analyze the cost of similar purchased items to determine pricing of your products. The exhibit may be a notebook, poster or small display.

Sewn Non-Clothing Exhibits (SF 50152b) Exhibit one of the following:

- Recycled Clothing Accessory – Create a clothing accessory made from a used item. The item must be changed in some way in the redesign process. The finished accessory must reflect at least one skill learned in the project and exhibitor should be able to identify the skill used. A before picture and a description of the redesign process must accompany the exhibit. Clothing accessory may include: hat, bag, scarf, belt, etc.
- Non-clothing item OR Clothing Accessory – Create a clothing accessory using at least one skill learned in this project. Exhibitor should be able to identify the skill used.

Sewn Clothing Exhibits (SF 50152c) Exhibit one of the following:

- Recycled Clothing – Create a garment from used textile based items. The original used item must be redesigned (not just embellished or decorated) in some way to create a new wearable piece of clothing. The finished garment must reflect at least one skill learned in this project and exhibitor should be able to identify the skill used. A before picture and a description of the redesign process must accompany the exhibit.
- Constructed garment – Any garment with facings or curves. Should use at least one skill learned in this project and exhibitor should be able to identify the skills used. Garment should be appropriate for the age and experience of the member.

STEAM Clothing 3 – A Stitch Further: (SF 50153a, 50153b, 50153c)

Exhibit one of the following in either the Non-Sewn, Sewn Non-Clothing, or Sewn Clothing exhibit divisions:

Non-sewn Exhibits (SF 50153a) Exhibit one of the following:

- Clothing Portfolio – Complete at least four different samples/activities from Chapters 2, 3 AND/OR 4 of the project manual. The Portfolio should be placed in an 8 ½ x 11, 3 ring binder. Include an appropriate cover, dividers, and table of contents. NOTE – this can be a continuation of a Portfolio created in STEAM Clothing 1 and/or STEM Clothing 2. Additional pages can be added each year but must be dated with the year created. See project manual, pages 11-13 for portfolio formatting.
- Expanded Textile Science Scrapbook - Must include at least 10 different textile samples. Use Textile Information Cards template on page 29 in project manual to identify fabric swatches. Completed textile cards should be placed in an 8 ½ x 11, 3 ring binder. Include an appropriate cover. See Project, pages 39-52 for fabric science experiments.
- Advanced Entrepreneurial Sewing – Using knowledge gained in project manual, Chapter 5, display one sample product with a business plan that includes a business ID and logo. The Exhibit may be a notebook, poster or small display.

Sewn Non-Clothing Exhibit (SF 50153b) Exhibit one of the following:

- Recycled Clothing Accessory – Create a clothing accessory made from a used item. The item must be changed in some way in the redesign process. The finished accessory must reflect at least one skill learned in the project and exhibitor should be able to identify the skill used. A before picture and a description of the redesign process must accompany the exhibit.
- Non-clothing item OR Clothing Accessory – Create a clothing accessory using at least one skill learned in this project. Exhibitor should be able to identify the skill used.

Sewn Clothing Exhibit (SF 50153c) Exhibit one of the following:

- Recycled Clothing – Create a garment from used textile based items. The original used item must be redesigned (not just embellished or decorated) in some way to create a new wearable piece of clothing. The finished garment must reflect at least one skill learned in this project and exhibitor should be able to identify the skill used. A before picture and a description of the redesign process must accompany the exhibit.

- Constructed garment – Any garment constructed by the member which is appropriate for the age and experience of the exhibitor. Should use at least one skill learned in this project and exhibitor should be able to identify the skills used. Possible examples are wool garment, dress or jacket with set in sleeves and zipper or buttons and button holes, suites evening gown or sport outfit.

CLOTHING: SHOPPING Exhibit one of the following options that align with the Shopping in Style level. If a garment is part of the 4-H exhibit, exhibitors should put the garment on PRIOR to their judging time.

Shopping in Style: Members are encouraged to spend more than one year involved in this project so they have time to learn what clothing styles look best on them while they also gain skills in building a versatile wardrobe and staying within their budget. Each year enrolled in Shopping should build on previous year's learning experience.

Shopping in Style (SF 50154)

Beginning – Choose one of the following activities from Unit 1 or Unit 2 of the project book

- Exhibit should consist of a garment that reflects your personal style along with a poster or report that 1) explains how this garment reflects your style and how it influences what others think of you; **OR** 2) how your personal style either aligns or contradicts what is considered to be “in style” today. **OR**
- Exhibit should include a garment you purchased along with a poster or report that explains or illustrates how this garment is either 1) a modern version of a fad or fashion from an earlier decade; **OR** 2) how this garment reflects a different ethnic or cultural influence. Exhibit should include garment you purchased along with a poster or report that provides 1) a body shape discussion and how body shape influences clothing selections; **OR** 2) a color discussion that provides an overview of how different colors complement different hair colors and skin tones and how that influenced garment selection. Poster or report may include pictures from magazines, the internet or actual photos of garments. **OR**
- Exhibit should include garment you purchased along with a poster or report that 1) explains how this garment uses the principles of design lines to create an illusion to alter appearance; **OR** 2) explains how color and texture of fabrics can complement or enhance appearance. Poster or report may include pictures from magazines, the internet, or actual photos of garments.

Intermediate – Choose one of the following activities from Unit 3 or Unit 4 of the project book (SF 50155)

- Exhibit should include two clothing items that were previously a part of your wardrobe that still fit but you don't wear anymore and pair them with something new to make them wearable again. Also include a report that explains why the garment was not being worn and what you did to transform it into a wearable garment again. **OR**
- Exhibit should include at least five pieces of clothing that exhibitor can mix and match to create multiple outfits. Include a poster or report that includes a clothing inventory AND describes what you have learned by completing this activity. **OR**
- Exhibit should include garment you purchased along with a poster or report that 1) includes a wardrobe inventory which indicates why you selected the garment you did, clothing budget, and cost of garment; **OR** 2) explains how advertising influences clothing purchases making a distinction between wants and needs; and how the purchase of this garment compliments and/or extends your wardrobe. **OR**
- Exhibit should include garment you purchased along with a poster or report that 1) describes a cost comparison of this item completed by the exhibitor when purchasing the garment; should include variety of shopping options and/or price tracking at stores over a period of time; **OR** 2) provides a quality comparison rating the specific clothing item purchased based on care, construction, cost and unique features; should include construction quality details, design features that influenced selection, cost per wearing, and garment care.

Advanced – Choose one of the following activities from Unit 5 or Unit 6 of the project book (SF 50156)

- Exhibit should include garment you purchased along with a poster or report that summarizes care requirements not only for this garment but also for garments made of other natural and synthetic fibers; exhibit should also include a care cost analysis for garments of different fibers. **OR**

- Exhibit should include garment you purchased which you have repaired or altered along with a poster or report that provides a clothing inventory list which includes cost savings for repaired items as compared to purchasing replacement garments.
- Exhibit should include multiple garments you purchased along with a poster or report that provides plans and commentary for a fashion show that that would capture the attention of an audience. Fashion show plans should identify target audience, include show venue, purpose of the show, and logistical plan for the fashion show. This should also include a financial plan. Exhibitor should be prepared to demonstrate modeling skills.

Sewing & Textiles Ready4Life Challenge (SF 50157)

Open to 11- to 18-year-olds enrolled in any Sewing & Textiles project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Clothing Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

COLLEGE & CAREER READINESS

Each county may submit 1 entry from 50365; and 1 entry from 50366.

Build Your Future (SF 50365)

Develop a Career portfolio which includes the items listed below. Members are encouraged to spend more than one year involved in this project so they have time to thoroughly explore the learning modules and develop a greater understanding of planning and preparing for their future and develop a comprehensive career planning portfolio. The original OR photocopies of the completed activities from the project manual should be included in the portfolio. Each year enrolled in the project should build on previous year's learning experiences.

- **First Year** – Complete a minimum of Activities 1-4 from the Build Your Future project manual which includes: Skills...Choices...Careers; Making Career Connections; Build Your Future Through Portfolios; and Education Pay\$.

- **Second Year** – Complete a minimum of Activities 5-7 from the Build Your Future project manual which includes: Career FUNds; Turn Your 4-H Passion Into Profit; and Pounding the Pavement.
- **Third Year** – Complete a minimum of Activities 8-9 from the Build Your Future project manual which includes: Putting the Pieces Together: Goals for the Future; and Pathways to Success.

College & Career Ready4Life Challenge (SF 50366)

Open to 11- to 18-year-olds enrolled in the College & Career project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

College & Career Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogrammed to perform a different function other than what it was designed to do)
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

COMMUNICATIONS

Each county may submit 2 entries total from 50367, 50368, 50369; and 1 entry from 50370.

Communications 1 (SF 50368)

For 1st year enrolled in project: Exhibit a binder portfolio showcasing at least three activities from the project manual. Show basic activities and anything that extended lessons. For 2nd and 3rd years in project: Include everything from earlier years' work and add section showcasing at least four additional activities per year.

Communications 2 (SF 50368)

For 1st year enrolled in project: Exhibit a binder portfolio showcasing at least three activities from the project manual. Show basic activities and anything that extended lessons. For 2nd and 3rd years in project: Include everything from earlier years' work and add section showcasing at least four additional activities per year.

Communications 3 (SF 50368)

For 1st year enrolled in project: Exhibit a binder portfolio showcasing at least three activities from the project manual. Show basic activities and anything that extended lessons. For 2nd and 3rd years in project: Include everything from earlier years' work and add section showcasing at least four additional activities per year.

Creative Writing (SF 50367)

To provide the best learning experience, it is suggested that counties receive submissions in this class prior to the exhibition date to allow a judge adequate time to read the submissions and provide meaningful review. Each member may submit only one entry per class. Each entry is to be typewritten on 8 ½ x 11 paper and include exhibitor's name. Entries must be original and **written for the 4-H project**. Stories should be double-spaced. Poems may be single-spaced.

- **Rhymed Poetry** – An interpretation of a subject in rhymed verse. Submit a collection of three poems.
- **Free Style Poetry**– An interpretation of a subject in unrhymed verse. Submit a collection of three poems.
- **Short Story**– A fiction piece comprised of three basic elements: a theme, a plot and characters. Submit one story, maximum length –2,000 words.
- **Essay**– A short nonfiction composition in which a theme is developed or an idea is expressed. Submit one essay, maximum length –500 words.
- **Feature Story** -- Nonfiction human-interest story judged on interest to readers, writing style, readability, and thoroughness of coverage. Submit one story, maximum length –1,000 words.

Journalism (SF 50369)

Exhibit a binder portfolio showing the results of the appropriate year's activities noted below:

- **Year 1:** Accomplishments of a minimum of 5, 2-star activities from Part 1, answering all of the questions in the activities.
- **Year 2:** Results of doing a minimum of 5, 2-star activities in Part 2, answering all the questions in the activities.
- **Year 3:** Results of doing a minimum of 5, 3-star activities from Parts 1 and 2. One of the activities must include writing an advance story, a follow-up story, or a feature story.
- **Year 4:** Results of doing at least 2, 2-star activities and 3, 3-star activities from Part 3. If the activities include making an audio or videotape, State Fair will provide a way for the judge to view or listen to it.

Communications Ready4Life Challenge (SF 50370)

Open to 11- to 18-year-olds enrolled in any Communications project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Communications Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)

- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

COMMUNICATIONS: PUBLIC PRESENTATIONS

Enrollment in the Public Presentations project is required to participate in this section. No live animals are allowed in speeches. Counties may advance a total of three entries from any category to the state contest.

Formal Speech | Self-written | Notes Allowed | No props | Individual | 4-8 minutes

Formal Speeches share the presenter's own unique view and are intended to motivate, persuade, or inform an audience and may include a call to action. Youth deliver a speech on any topic they wish (Original Oratory), or choose one of these four topics on which to speak (Topical Response):

- Welcome to the Digital Age
- What is My Connection to the Global Community?
- Power: Who Has It, Who Doesn't, and Does It Matter?
- If I Could See tomorrow...

Illustrated Speech | Self-written | Notes allowed | Illustrations Required | Individual | 4-8 minutes

Illustrated Speeches may be used to inform, persuade, or motivate the audience while using a visual aid. Visual aids may be two dimensional, three-dimensional, or digital. Youth may include audience participation. Digital visual aids must be stored on a USB flash drive. Illustrated speeches may be:

- How-to demonstrations which show the audience how to do something.
- Object lessons which use objects as metaphors to share a message.
- Educational models where drawings or diagrams help explain a topic.

Original Works | Self-written | Notes allowed | Props and Costumes Allowed | Individual or 2-Person Team | Manuscripts sent in Advance | 4-8 minutes

Original works must be written entirely by the presenter. It may be presented as an individual or a two-person team entry. Manuscripts must be sent in advance to the contest. Presentations may be designed for TV, radio, or online media and must be presented live. The types of entries could include:

- Prose and Short Stories
- Poetry
- Broadcast Media Program
- Theatrical
- Combined Program: Combine any number of the above elements along with other creative presentation forms

Oral Interpretation | Published work | Props and Costumes Allowed | Individual or 2-Person Team | Manuscripts sent in Advance | 4-8 minutes

Presentations in Oral Interpretation must be published works, and manuscripts or transcripts must be submitted prior to the event. They may be presented as an individual or a two-person team entry. The types of entries could include:

- Prose and Short Stories
- Poetry
- Theatrical Interpretation
- Published Speech Recitation: Excerpt from a spoken presentation delivered by a public figure, such as

Winston Churchill, Dr. Martin Luther King, Jr., or Maya Angelou

- Combined Program: Combine any number of the above elements along with other creative presentation forms

COMPUTER SCIENCE

Each county may submit 3 entries total from 50159, 50160, 50161, 50162; and 1 entry from 50164.

Exhibitors may bring computer equipment for demonstration purposes. Computers will not be furnished. Internet connections are not available for use by exhibitors. Any member found to be using computer software in a manner that infringes on copyright laws will be disqualified.

Beginning Visual Programming (not eligible for state fair)

Open to youth in Computer Science Visual Based Programming

Exhibit a simple program using Scratch (or other simple graphic programming language). The program should include 8 different commands including looping and getting input from the keyboard and mouse. All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Intermediate Visual Programming (SF 50159)

Open to youth in Computer Science Visual Based Programming

Exhibit a program using Scratch (or other simple graphic programming) that you have downloaded from the internet and modified. Compare the two programs and demonstrate the changes you made to the original program; **OR** create an animated storybook using Scratch (or other simple graphical programming language). All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Advance Visual Programming (SF 50160)

Open to youth in Computer Science Visual Based Programming

Exhibit a video game you have created in Scratch (or other simple graphic programming). All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Website Design: (SF 50161)

Open to youth in Computer Science Visual or Text Based Programming

Exhibit an original website that you have designed. Internet access will not be provided, so exhibitors must supply their own internet hot spot or the website must be hosted on the exhibitor's computer). All exhibits must include something visual, such as a poster or printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Computer Open Source / Innovation CS (SF 50162)

Open to youth enrolled in Computer Science Text-Based Programming or robotics project).

Demonstrate the skills and knowledge you have gained through the Computer project. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. Exhibits in this class may also demonstrate successful application of open source (publicly available) computing software and/or hardware,

such as Raspberry Pi and Linux, to accomplish a task. All exhibits must include something visual, such as a poster or printed copy of a digital presentation or programming flowchart, which will remain on display during the exhibition. Exhibits in this area will be judged on the computer science programming. Youth enrolled in a robotics project should choose this class if you want the exhibit to be judged on the programming of the robot. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Computer Science Ready4Life Challenge (SF 50164)

Open to 11- to 18-year-olds enrolled in any Computer project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Computer Science Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogrammed to perform a different function other than what it was designed to do)
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

CONSUMER EDUCATION

Each county may submit 2 entries total from 50168, 50169; and 1 entry from 50167.

Entrepreneurship: Be the E! (not eligible for state fair)

Exhibit a binder portfolio or display that includes the results of at least two completed activities from each year exhibitor has been enrolled in the project. Completed activities from previous years should be included.

My Financial Future 1 Beginner (SF 50168)

Develop a Financial Planning portfolio which includes the items listed below. This project can be completed all in one year; or a member may take several years to explore each of the activities and develop a more detailed financial plan. The original OR photocopies of the completed activities from the project manual should be included in the portfolio. Each year enrolled in the project should build on previous year experiences.

- **First Year** – Complete a minimum of Activities 1-6 from the My Financial Future – Beginner project manual which includes: Who Needs This?; Let's get SMART; Bringing Home the Bacon; Managing Your Money Flow; My Money Personality; and Money Decisions.

- **Second Year and Beyond** – Complete a minimum of Activities 7-11 from the My Financial Future – Beginner project manual which includes: Banking your \$\$\$\$; Charging it Up; Check it Out; Better than a Piggy Bank!; and My Work; My Future.

My Financial Future 2 Advanced (SF 50169)

Building on your previous work in My Financial Future – Beginner project, continue adding to your Financial Planning portfolio which includes the items listed below. Members are encouraged to spend more than one year involved in this project so they have time to thoroughly explore the learning modules and develop a greater understanding of financial literacy, planning for their future, and develop a comprehensive career and financial planning portfolio. The original OR photocopies of the completed activities from the project manual should be included in the portfolio. Each year enrolled in the project should build on previous year's learning experiences.

- **First Year** – Complete a minimum of two activities from Module 1: Earning Income and Career Planning and Module 2: Organizing Your Flow.
- **Second Year** – Complete all activities not previously completed in Module 1: Earning Income and Career Planning and Module 2: Organizing Your Flow; **AND** a minimum of two the activities from Module 3: Working with Banks and Credit Unions: Bank on It and Module 4: Making Your \$ Work 4 U.
- **Third Year and beyond** – Complete all activities not previously completed in Module 3: Working with Banks and Credit Unions: Bank on It and Module 4: Making Your \$ Work 4 U; **AND** a minimum of two activities from Module 5: Credit and Consumer Breadcrumbs.

Consumer Ed Ready4Life Challenge (SF 50167)

Open to 11- to 18-year-olds enrolled in any Consumer Education project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Consumer Ed Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

CROPS

Each county may submit 3 entries total from 50170, 50171, 50172, 50173; and 1 entry from 50175.

Soybeans (SF 50170)

Exhibit five fresh plants (include root system that is washed) that are representative of member's 4-H project field; **OR** exhibit an experimental or educational project related to one experience from your project. Include explanation of the project in a report for public understanding. Include the member's crop records with the exhibit, such as the 4-H Crop record found online @ 4-H.illinois.edu, an FFA crops record, or similar information.

Corn (SF 50171)

Exhibit two fresh plants of field corn (include root system that is washed), that is representative of member's 4-H project field; **OR** exhibit an experimental or educational project related to one experience from your project. Include explanation of the project in a report for public understanding. *Sweet corn should be exhibited in Vegetable Gardening unless being raised under commercial contract by the exhibitor.* Include the member's crop records with the exhibit, such as the 4-H Crop record found online @ 4-H.illinois.edu, an FFA crops record, or similar information.

Small Grains (SF 50172)

Exhibit one gallon of the current year's crop of oats, wheat, rye, or barley that is representative of the member's 4-H project field; **OR** exhibit an experimental or educational project related to one experience from your project. Include explanation of the project in a report for public understanding. Include the member's crop records with the exhibit, such as the 4-H Crop record found online @ 4-H.illinois.edu, an FFA crops record, or similar information.

AGRICULTURE GENERAL (not eligible for state fair or premiums)

Hay: Bring a bale of any type of hay that was produced by the member in this 4-H year.

Crops Innovation Class (SF 50173)

Open to youth enrolled in any Crops project

Demonstrate the skills and knowledge you have gained through the Crops project. This could be related to, but not limited to crop production, crop utilization or topics of interest to the member related to agronomy. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Crops Ready4Life Challenge (SF 50175)

Open to 11- to 18-year-olds enrolled in any Crops project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Crops Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

ELECTRICITY

Each county may submit 3 entries total from 50177, 50178, 50179; and 1 entry from 50181.

Electricity 1 (SF 50177)

(May only be battery-powered projects using battery components and wiring). Exhibit a momentary switch, simple switch, basic circuit, electromagnet, galvanometer, **OR** an electric motor. All projects must include a report explaining how the project was constructed and the principles demonstrated. Recommendations can be found on the website. Projects using paper clips, cardboard, thumbtacks, & brads are not eligible for state fair exhibits in electricity. Members wishing to exhibit these types of projects should consider exhibiting in Junkdrawer Robotics 1 or 2.

Electricity 2 (SF 50178)

(May only be battery-powered projects using battery components and wiring) Exhibit a circuit board demonstrating parallel and series switches, including a circuit diagram; 3-way or 4-way switch circuit using DC/battery; **OR** a basic electrical device (examples: rocket launcher, burglar alarm, etc). All projects must include a report explaining how the project was constructed and the principles demonstrated. Recommendations can be found on the website. Projects using paper clips, cardboard, thumbtacks, & brads are not eligible for state fair exhibits in electricity. Members wishing to exhibit these types of projects should consider exhibiting in Junkdrawer Robotics 1 or 2.

Electricity 3 (SF 50179)

Exhibit a 120V lighting fixture or other appliance which uses a switch; **OR** two electrical household circuits using 120V materials to comply with National Electrical Code, one with a simple on/off switch to control bulb, and one using 3-way switches to control light from two locations; **OR** other project which demonstrates principles in the Wired for Power book. All electricity projects must include a report, explaining how the project was constructed, and principles for its operation. Recommendations can be found on the website.

Electricity 4 (not eligible for state fair)

Exhibit any electronic or solid state appliance. Exhibitor must be able to explain how the project was constructed, how it is to be used and how it works. When project is being constructed, general safety and workmanship should be considered.

Electricity Ready4Life Challenge: (SF 50181)

Open to 11- to 18-year-olds enrolled in any Electricity project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Electricity Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

ENTOMOLOGY GENERAL

Each county may submit 2 entries total from 50183, 50184, 50185, 50186; 1 entry from Class 50187.

Size and number of exhibit cases should relate appropriately to the number of insects being displayed for a specified class. Cases should be no deeper than 4". Exhibitors should note that Entomology exhibits may be placed UPRIGHT for display.

Entomology 1 (SF 50183)

Exhibit 15 or more species representing four or more orders. Collection must be accurately labeled. Exhibitors must also include the Entomology 1 project manual, *Teaming With Insects 1*, with at least one completed activity for each year enrolled. The project manual must be included. Rules for pinning and labeling insects are available from your local Extension office.

Entomology 2 (SF 50184)

Exhibit 30 or more species representing eight or more orders. Collection must be accurately labeled. Exhibitors must also include the Entomology 2 project manual, *Teaming With Insects 2*, with at least one completed activity for each year enrolled. The project manual must be included. Rules for pinning and labeling insects are available from your local Extension office.

Entomology 3 (SF 50185)

Exhibit 60 or more species representing twelve or more orders. Collection must be accurately labeled. Exhibitors must also include the Entomology 3 project manual, *Teaming With Insects 3*, with at least one completed activity for each year enrolled. The project manual must be included. Rules for pinning and labeling insects are available from your local Extension office.

Entomology Display (SF 50186)

Open to youth enrolled in Entomology 1, Entomology 2 or Entomology 3

Exhibit any activity or display related to Entomology that does not fit into Entomology Classes 1, 2 or 3 above. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Entomology Ready4Life Challenge (SF 50187)

Open to 11- to 18-year-olds enrolled in any Entomology project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Entomology Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

ENTOMOLOGY BEEKEEPING

Each county may send 2 entries total from classes 50188, 50189, 50190; and 1 entry from 50191.

Create an exhibit that shows the public what you learned in the beekeeping project this year. **Note:** No bee hives may be exhibited. (Honey moisture 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 plastic box). *Honey exhibited (including chunk, cut comb, and sections) must be collected since the previous year fair.*

Beekeeping 1 (SF 50188)

Exhibit an educational display for one (1) of the following:

- Flowers Used to Make Honey. Display pressed flowers from ten (10) different Illinois plants that bees use for making honey.
- Uses of Honey and Beeswax.
- Setting Up a Bee Hive.
- Safe Handling of Bees.
- Equipment needed by a Beekeeper.

Beekeeping 2 (SF 50189)

Exhibit one (1) of the following:

- Extracted Honey: Three (3) 1# jars, shown in glass, screw-top jars holding 1 # of honey each.
- Chunk honey (comb in jar): Three (3) 1# jars (wide-mouth glass jars).
- Cut-comb honey: Three (3) 1# boxes (boxes are usually 4 ½" x 4 ½").
- Section honey: three (3) sections of comb honey (in basswood boxes or Ross rounds).
- Working with Honey Bees. Present a topic from your manual to teach fairgoers about working with honey bees. Use your knowledge and creativity to display this information on a poster or in a notebook.

Beekeeping 3 (SF 50190)

Exhibit three (3) of the five (5) kinds of honey listed below (#1-5) or prepare an educational display about honey bees or beekeeping.

1. Extracted Honey: Three (3) 1# jars (glass)
2. Chunk Honey (comb in a jar): Three (3) 1# jars (wide-mouth glass)
3. Cut-comb Honey: Three (3) 1# boxes (boxes are usually 4 ½" x 4 ½" in size)
4. Comb Honey- 3 sections (honey built by bees in frames of wood commonly called "sections" (boxes are usually 4 ½" x 4 ½" in size)
5. Section honey: three (3) sections of comb honey (in basswood boxes or Ross rounds) or
6. Prepare an educational display about honey bees or beekeeping.

Entomology Beekeeping Ready4Life Challenge (SF 50191)

Open to 11- to 18-year-olds enrolled in any Entomology project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Beekeeping Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do

- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

EXPLORATORY

EXPLORATORY (*Welcome to 4-H*) (not eligible for state fair)

Youth ages 8 – 10 may exhibit a display on one of the following topics from the project book.

- windowsill gardening;
- 4-H animals;
- 4-H family; **OR**
- coat of arms

COLLECTIBLES (not eligible for state fair)

Bring your completed project book and your collection or examples of your collection (if it's too large to bring) with pictures of total collection, OR an exhibit or poster illustrating one feature of the project.

Do Your Own Thing (not eligible for state fair)

Bring your completed exhibit that does not fit in any other project category.

FAMILY HERITAGE

Each county may submit 1 entry from 50197; and 1 entry from 50199.

Family Heritage (SF 50197)

Prepare an exhibit of items, pictures, maps, charts, slides/tapes, drawings, illustrations, writings or displays that depict the heritage of the member's family or community or 4-H history. Please note: Exhibits are entered at 4-H's own risk. 4-H is not responsible for loss or damage to family heirloom items or any items in this division. Displays should not be larger than 22" x 28" wide. If the size needs to be a different size because the historical item is larger than 22"x28" please contact the superintendents for approval.

Family Heritage Ready4Life Challenge (SF 50199)

Open to 11- to 18-year-olds enrolled in any Family Heritage project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Family Heritage Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

FOODS & NUTRITION

Each county may submit 7 entries total from any of these food classes: 50200, 50201, 50202, 50203, 50204, 50206, 50208, 50211; and 1 entry from 50210.

4-H Cooking 101 (SF 50200)

Using the recipes included in the project manual, prepare an exhibit of 3 cereal marshmallow bars; **OR** ¼ of 8" square or round coffeecake; **OR** 3 cookies. No icing should be on any products. If you make changes to the recipe, bring a copy of the recipe with your changes. Bars, coffeecake, or cookies should be displayed on a disposable plate placed in a zip-sealing plastic bag. *In addition to your food exhibit*, complete the *What's on Your Plate? Activity* on pages 10-11 in the 4-H Cooking 101 project manual. Bring a document with printed pictures of your 3 or more plates and the answers to questions 1-7 to remain on display with your project. The words on the plates must be legible and clearly visible in the picture. Pictures, graphics or photos are acceptable.

4-H Cooking 201 (SF 50201)

Using the recipes included in the project manual, prepare an exhibit of 3 cheese muffins; **OR** 3 scones; **OR** ½ loaf (9" x 5") of basic nut bread. If you make changes to the recipe, bring a copy of the recipe with your changes. Bread, muffins, or scones should be displayed on a disposable plate placed in a zip-sealing plastic bag. *In addition to your food exhibit*, complete *Experiment with Meal Planning Activity* on page 91 in the 4-H Cooking 201 project manual. Bring either page 91 with your completed answers or a document with the answers to remain on display with your project along with a picture of the meal you prepared. You do **not** need to complete the Challenge Yourself section on page 91.

4-H Cooking 301 (SF 50202)

Using the recipes included in the project manual, prepare an exhibit of 3 dinner rolls; **OR** loaf of yeast bread; **OR** 1 tea ring; **OR** 3 sweet rolls; **OR** one layer of a Rich White Cake or Rich Chocolate Cake, top side up (*without frosting*). If icing is used on the tea ring or sweet rolls, the recipe for the icing must also come from the book. The yeast bread/roll dough may be prepared in a bread making machine; however prepared mixes are not permitted. If you make changes to the recipe, bring a copy of the recipe with your changes. Display exhibit on a disposable plate or pie tin and place in a zip-sealing plastic bag. *In addition to your food exhibit*, complete one of the six experiments: *Experiment with Flour* p. 33-34, *Experiment with Kneading* p. 35-36, *Experiment with Yeast* p. 37-38 or 39, *Experiment with Butter* p. 62-63 or *Experiment with Cheese* p. 104-105. Bring a document with a printed picture of your experiment and the answers to the experiment questions to remain on display with your project.

4-H Cooking 401 (SF 50203)

*Using the recipes included in the project manual, prepare an exhibit of ¼ of a 15" x 10" loaf of focaccia bread (do not include dipping oil); **OR** one baked pie shell – traditional, oil, or whole wheat (no graham cracker); **OR** ¼ Golden Sponge Cake, top side up, without frosting; **OR** ½ loaf French Bread. If you make changes to the recipe, bring a copy of the recipe with your changes. Display exhibit on a disposable plate and place in a zip-sealing plastic bag. *In addition to your food exhibit*, pick one of the recipes from Cooking 401 that is not a choice for exhibit. Make the recipe and take a picture of the results. Bring a document with a printed picture of the food you made from the recipe and the answers to the following two questions: 1.) If you made this recipe again, what would you do differently? 2.) What did you learn that can help you in other ways besides preparing food?*

Food Science 1 (SF 50204)

Prepare a display, digital presentation, or poster on one of the food science experiments from the manual that you completed. Share 1) the food science question you investigated; 2) process used to conduct the experiment; 3) results and observations; 4) what you learned; and 5) how you have applied this information. You must furnish any equipment you need for the exhibit. Internet service is not provided. All exhibits must include something visual, such as a printed copy of a digital presentation. Electronic equipment will only be used during your judging time and will not remain on display during the exhibit period.

Food Science 2 (SF 50204)

Prepare a display, digital presentation, or poster on one of the food science experiments from the manual that you completed. Share 1) the food science question you investigated; 2) process used to conduct the experiment; 3) results and observations; 4) what you learned; and 5) how you have applied this information. You must furnish any equipment you need for the exhibit. Internet service is not provided. All exhibits must include something visual, such as a printed copy of a digital presentation. Electronic equipment will only be used during your judging time and will not remain on display during the exhibit period.

Food Science 3 (SF 50204)

Prepare a display, digital presentation, or poster on one of the food science experiments from the manual that you completed. Share 1) the food science question you investigated; 2) process used to conduct the experiment; 3) results and observations; 4) what you learned; and 5) how you have applied this information. You must furnish any equipment you need for the exhibit. Internet service is not provided. All exhibits must include something visual, such as a printed copy of a digital presentation. Electronic equipment will only be used during your judging time and will not remain on display during the exhibit period.

Food Science 4 (SF 50204)

Prepare a display, digital presentation, or poster on one of the food science experiments from the manual that you completed. Share 1) the food science question you investigated; 2) process used to conduct the experiment; 3) results and observations; 4) what you learned; and 5) how you have applied this information. You must furnish any equipment you need for the exhibit. Internet service is not provided. All exhibits must include something visual, such as a printed copy of a digital presentation. Electronic equipment will only be used during your judging time and will not remain on display during the exhibit period.

Sports Nutrition (SF 50206)

Prepare a display, digital presentation, or poster on one of the activity chapters in the manual that you completed. The activity chapters are listed by page number in the table of contents. Your exhibit should include, at minimum, information on one physical fitness component and one food/recipe component from the activity chapter. The exhibit should include the project manual with the pages of the activity completed. You may also include live demonstration of physical activities. Do not bring food made using the recipes, but consider adding pictures of the completed recipes to your exhibit. You must furnish any equipment you need for the exhibit. Internet service is not provided. All exhibits must include something visual, such as a printed copy of a digital presentation. Electronic equipment will only be used during your judging time and will not remain on display during the exhibit period.

Examples for Activity 1

Example A: Make a video of yourself practicing flexibility, strength and endurance physical fitness activities and making pasta salad with different vegetable, pasta and dressing ideas. Bring a screen shot and brief description of your video to leave on display.

Example B: Make a poster of pictures of flexibility, strength and endurance physical fitness activities and information on the results of making the spinach and mandarin orange salad. Include answers to the questions in the book.

Food Preservation (SF 50208)

Prepare an exhibit using ONE of the following food preservation methods: canning; freezing; drying; pickles/relishes; jams, jellies and preserves **OR** a combination of these (see Preservation Combination option below), excluding Freezing. **No freezer jam exhibits will be allowed for Freezing; Jams, Jellies, and Preserves; or for the Preservation Combination options.**

- **Canning** – The exhibit should include two different canned foods in appropriate jars for the products. Food may be fruit, vegetable, or tomato product (i.e. salsa, juice, etc.).
- **Freezing** – Prepare a nutrition display that illustrates a freezing principle. There is NOT a food exhibit option for this preservation method.
- **Drying** – Exhibit two (2) different dried foods packed in plastic food storage bags. Choose from fruit, vegetable, fruit leather or meat jerky.
- **Pickles and Relishes** – Exhibit two pint jars of different recipes of pickles and/or relishes.
- **Jams, Jellies, and Preserves** – Exhibit half-pint jars of two different jams, jellies, and/or preserves.
- **Preservation Combination** – Exhibit two different preserved food products, excluding Freezing, in appropriate jars/package (drying). For example, exhibit 1 jar of tomatoes (Canning) and 1 half-pint of jelly (Jams, Jellies, and Preserves).

All preserved products should be prepared and processed according to the current USDA/Extension information. USDA information on preserving food, including recipes, can be found at: www.homefoodpreservation.com or web.extension.illinois.edu/foodpreservation/ Recipes must be processed in a water-bath or pressure canner.

All food exhibits must be labeled with: 1) The name of the food; 2) The date preserved; 3) Appropriate method(s) of food preservation (For canned projects: boiling water bath or pressure canner; For drying projects: Specify equipment used (food dehydrator, oven, etc.))

Examples:

- Strawberry jam, boiling water bath. July 13, 2014.
- Green beans, pressure canner. July 13, 2014.
- Beef jerky, food dehydrator and oven. July 13, 2014.

All food exhibits must be accompanied with the recipe(s) – typed or written, with the source of the recipe(s) listed.. **Required Recipes and Sources for Food Preservation Exhibits** – all food preservation recipes be from an approved source. Those sources are:

- *PUT IT UP! Food Preservation for Youth* manuals
- U.S. Department of Agriculture (USDA)
- National Center for Home Food Preservation
- Ball/Kerr Canning (recipes after 1985)
- Mrs. Wages

DO NOT BRING RECIPES FROM: Magazine or newspaper clippings, Pinterest (unless it is from a source listed above), Grandma's or a recipe from a family member or friend without a source, Cookbooks (excluding the Ball, Kerr and Put It Up! book).

Canning Equipment Requirements: All canned products must be canned in clear, standard jars in good condition (no chips or cracks). Jars must be sealed using two-piece canning lids (flat lid and band). Must use a new, unused flat lid. Bands must not be rusty or severely worn.

Foods Innovation Class (SF 50211)

Open to youth enrolled in any Foods project.

Demonstrate the skills and knowledge you have gained through the project. The exhibit may include, but isn't limited to, original recipes, results of experiments not in the foods project books, variations on recipes or experimenting with unique cooking or baking methods. Your work can be displayed by a food product, demonstrations, digital presentations, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. If you bring a food product, the food will NOT be tasted.

Foods Nutrition Ready4Life Challenge (SF 50210)

Open to 11- to 18-year-olds enrolled in any Foods project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Foods Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

FORESTRY

Each county may submit 1 entry total from 50212, 50213, 50214; and 1 entry from 50216.

Forests of Fun 1 (SF 50212)

Exhibit any product or display illustrating an activity from the book. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Forests of Fun 2 (SF 50213)

Exhibit any product or display illustrating an activity from the book. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Forests of Fun 3 (SF 50214)

Exhibit any product or display illustrating an activity from the book. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Forestry Ready4Life Challenge (SF 50216)

Open to 11- to 18-year-olds enrolled in any Forestry project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Forestry Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and MUST be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device MUST be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit MUST be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits MUST include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

GEOLOGY

Each county may submit 3 entries total from 50218, 50219, 50220, 50221, 50222; and 1 entry from 50224.

Size and number of exhibit cases should relate appropriately to the number of specimens being displayed for

a specified class. Specimens are not limited to Illinois locations. All levels of Geology use the same manual, Geology-Introduction to the Study of the Earth.

Pebble Pups 1 (SF 50218)

Display 8 to 19 rocks and mineral specimens with three minerals in the collections. Collection may include duplications that show variations. Label collection and note where found.

Pebble Pups 2 (SF 50219)

Display at least 20, but no more than 29, rocks and mineral specimens with seven minerals in the collections. Collection may include duplications that show variations. Label collection and note where found.

Rock Hounds 1 (SF 50220)

Display at least 30, but no more than 40, rocks and mineral specimens with ten minerals in the collection. Rocks should include at least three igneous, two metamorphic, and three sedimentary groups. Label collection and note where found.

Rock Hounds 2 (SF 50221)

Display no more than 50 specimens that have been selected to illustrate a specific theme of the exhibitor's choosing. Be creative. Sample categories could include (but are not limited to): industrial minerals and their uses; a specific rock group and the variety that occurs in that group, including some minerals that occur in that environment; select fossils traced through the geologic ages; minerals and their crystal habits; rocks and minerals used in the lapidary arts.

Geology Innovation Class (SF 50222)

Open to youth enrolled in Geology.

Demonstrate the skills and knowledge you have gained through the Geology project. Exhibit may be the result of knowledge gained from project manuals; independent study about Illinois rock(s) and mineral(s), interaction with geology professionals; and/or individual exploration in the area of geology. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Geology Ready4Life Challenge (50224)

Open to 11- to 18-year-olds enrolled in the Geology project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Geology Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project MUST abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.

- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

HEALTH

Each county may submit 3 entries total from 50226, 50227, 50228, 50229; and 1 entry from 50231.

Health 1 (SF 50226)

Select four First Aid Skills and complete the activities for that section. Bring the project book and be prepared to discuss the completed sections. Exhibit a family first aid kit and be prepared to explain what each items is used for.

Health 2 (SF 50227)

Select four [Staying Healthy](#) skills and complete the activities for that section. Bring the project book and be prepared to discuss the completed sections. Exhibit a “smarts” project as explained in the project manual.

Health 3 (SF 50228)

Select four Keeping Fit Skills and complete the activities for that section. Bring the project book and be prepared to discuss the completed sections. Exhibit a poster or display on one of the Keeping Fit Skills.

Health Innovation Class (SF 50229)

Open to youth enrolled in Health 1, 2 or 3.

Demonstrate the skills and knowledge you have gained through the Health project. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Health Ready4Life Challenge (SF 50231)

Open to 11- to 18-year-olds enrolled in any Health project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical

specimen on display.

Health Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

HORTICULTURE: FLORICULTURE

Each county may submit 3 entries total from 50192, 50193, 50194, 50195, 50196; and 1 entry from 50198.

Floriculture A (SF 50192)

Exhibit one of the following options:

- Create a flower arrangement; either a round arrangement or a bud vase. No silk flowers are permitted; **OR**
- Create a photo collage or a collection of pictures of flowers that you have raised. Label your flowers by name and tell if you started with a seed, cutting or transplants. Mount pictures on a poster board; **OR**
- Exhibit in one container, 3 stems of blooms - each with attached foliage. Foliage that would go inside the container may be removed. All three blooms or stems should be the same variety, color, shape and size and must have been grown from seed, young seedling plants, bulbs or rhizomes by the exhibitor. (NOTE: Exhibitors choosing lilies should include no more than 2/3 of foliage for their exhibit.)

Floriculture B (SF 50193)

Exhibit one of the following options:

- Create an artistic display of dried flowers explaining how each was dried; **OR**
- Create a photo collage or collection of pictures of plants from your theme garden. Label your plants by name and explain how the plants were chosen to fit the theme.

Floriculture C (SF 50194)

Exhibit one of the following options:

- Create a terrarium. Selected plants should be started by the exhibitor from cuttings or seeds or as purchased plugs. The terrarium must be cared for by the exhibitor for at least 5 months. Exhibitor should be able to explain the different plant, soil, and environmental needs and watering requirements of a closed system; **OR**
- Exhibit a plant that you propagated from cuttings, layering or division or started from seed. Create a photo board showing the progression of growth. Tips for vegetative propagation of houseplants can be found at University of Illinois Extension houseplants, <http://urbanext.illinois.edu/houseplants/default.cfm>.

Floriculture D (SF 50195)

Exhibit one of the following options:

- Create a centerpiece around a theme such as a wedding, holiday, birthday, etc. No silk flowers are permitted; **OR**
- Create an exhibit of forced bulbs in a pot.

Floriculture Display (SF 50196)

(Open to youth enrolled in Floriculture A, Floriculture B, Floriculture C, and Floriculture D)

Present an exhibit of the member's choice that focuses on some aspect of floriculture which does not fit in the categories above. The exhibit may include, but isn't limited to, dish gardens, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Floriculture Ready4Life Challenge (SF 50198)

Open to 11- to 18-year-olds enrolled in any Floriculture project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Floriculture Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, AND contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

HORTICULTURE: VEGETABLE GARDENING

Each county may submit 3 entries total for 50314, 50315, 50316; and 1 entry for 50318.

All vegetables exhibited must have been grown by the exhibitor as part of their current gardening 4-H project. Exhibitors should be knowledgeable about various aspects of the vegetables, including but not limited to different varieties, soil testing, fertilizers used, etc. Vegetable exhibits should be prepared according to the Illinois Vegetable Garden Guide website: <http://web.extension.illinois.edu/vegguide/>. Waxes and oils may not be used on vegetables or fruits. Any plant infested with insects will be removed from the exhibit area and will not be eligible for a Superior exhibit.

Vegetable Display (SF 50314)

(Open to youth in Vegetable Gardening A, Vegetable Gardening B, Vegetable Gardening C, and Vegetable Gardening D)

1. This class is allowed a 2'6" x 2'6" space for display.
2. Display must include 6 or more different kinds of vegetables. There may not be more than 2 different varieties of any vegetable. For example, red and white potatoes would be classified as two different varieties. Acorn squash and zucchini would be classified as two different vegetables.
3. The number and type of vegetables used must conform to the Vegetable Plate/Basket List.
4. Exhibitors must provide the name and variety of all vegetables used (i.e. Cabbage – Golden Acre; Cucumber, slicing – Straight Eight; Tomatoes, slicing – Rocky Top; Snap Beans – Contender, etc.).

Vegetable Plate (SF 50315)

(Open to youth in Vegetable Gardening A, Vegetable Gardening B, Vegetable Gardening C, and Vegetable Gardening D)

1. Exhibit must include 2 single vegetable plates. (Exhibitor will furnish the disposable plates.)
2. Number of vegetables on plates must conform to plate list below.
3. Only one variety on each plate.
4. An exhibitor cannot show two plates of the same type vegetable. (i.e.: Cannot exhibit red *and* white potatoes or zucchini *and* straightneck summer squash.)

VEGETABLE PLATE/DISPLAY LIST

When selecting vegetables for exhibition, keep in mind that the judge will evaluate them on the basis of cleanliness, uniformity, condition, quality, and trueness to variety. *(Lists are provided by UI Extension Horticulturists; Items are listed according to the correct definition of vegetables)*

Asparagus (5 spears)	Parsnips (5)
Beans, Lima (12 pods)	Peas, (12 pods)
Beets (5)	Peppers, large fruited (bell/banana) (5)
Broccoli (1 head)	Peppers, small fruited (chili/cherry) (12)
Brussels sprouts (12 sprouts)	Popcorn (5)
Cabbage (1 head)	Potatoes (any variety) (5)
Cauliflower (1 head)	Pumpkin (1)
Carrots (5)	Rhubarb, trimmed stalks (3)
Cucumber, pickling or slicing (5)	Rutabaga (5)
Eggplant (1)	Salsify (5)
Garlic (5)	Squash, summer (any variety) (3)
Kohlrabi (5)	Sweet Corn, in husks (5)
Lettuce (1 head or plant)	Tomatoes, slicing (5)
Muskmelon incl. cantaloupe (1)	Tomatoes, small fruited (12)
Okra (12)	Turnip (5)
Onions, large, dry (5)	Watermelon (1)
Onions, green or set (12)	Beans, Snap, Green Pod or Golden Wax (12 pods)
Squash, winter (Acorn, butternut, buttercup, spaghetti, Hubbard, Turks's Turban) (1)	
Greens (collard, endive, escarole, kale, mustard, spinach, Swiss chard) (1 plant)	
Horseradish Root (1 marketable root specimen harvested this year)	

Vegetable Gardening Display (SF 50316)

(Open to youth in Vegetable Gardening A, Vegetable Gardening B, Vegetable Gardening C, Vegetable

Gardening D) Present an exhibit of the member's choice that focuses on some aspect of vegetable gardening which does not fit in the categories above. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Vegetable Gardening Ready4Life Challenge (SF 50318)

Open to 11- to 18-year-olds enrolled in any Vegetable Gardening project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Vegetable Gardening Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

INTERCULTURAL

Each county may submit 1 individual entry from 50233; 1 individual entry from 50234; 1 individual entry from 50236; 1 club entry from 50235. **Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.**

Passport to the World, Individual (SF 50233)

Prepare a display illustrating what you have learned about a country's or U.S. region's geography, economy, agriculture, people, language, housing, culture, music, crafts, clothing, holidays or other

aspect. Exhibit should be educational in nature and should not promote one's beliefs over another person's beliefs. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. Include the project manual with completed sections that pertain to the exhibit information. Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.

Diversity & Cultural Awareness (SF 50234)

Create a display or binder portfolio that illustrates the results of a minimum of three (3) completed activities from the project book. Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.

Intercultural Ready4Life Challenge (SF 50236)

Open to 11- to 18-year-olds enrolled in any Intercultural project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Intercultural Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

Intercultural, Club, Includes *Passport to the World, Diversity & Cultural Awareness, and Latino Cultural Arts Projects* (SF 50235)

Exhibit a display illustrating the steps that the club has completed on the project selected for the year. Include a written outline or report of accomplishments and future goals. The exhibit may

include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what the club members have learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. The display must be accompanied by 3 or more club exhibitors at the time of the judge's critique. Club members should make a 5- to 10-minute presentation to the judge. All club members present for the judge's critique should be able to discuss the project and answer questions. Only club members present for judging who participate in the actual critique and presentation are eligible for ribbons and premiums. Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.

INTERIOR DESIGN

Each county may submit 2 entries total from 50242, 50243, 50244, 50245; and 1 entry from 50247.

Design Decisions, Beginning (SF 50242)

Any exhibit must have been created or redesigned by the exhibitor as part of their current Interior Design 4-H project. Exhibitors should be knowledgeable about various aspects of the project. Exhibits could include items such as, but not limited to, comparison studies of different products or techniques; made accessories, wall-hangings, window coverings, or furniture items; refinished or redesigned furniture; or a plan to solve some type of interior design problem. Exhibit should be appropriate to the exhibitor's age, skills and ability in this project.

Design Decisions, Intermediate (SF 50243)

Any exhibit must have been created or redesigned by the exhibitor as part of their current Interior Design 4-H project. Exhibitors should be knowledgeable about various aspects of the project. Exhibits could include items such as, but not limited to, comparison studies of different products or techniques; made accessories, wall-hangings, window coverings, or furniture items; refinished or redesigned furniture; or a plan to solve some type of interior design problem. Exhibit should be appropriate to the exhibitor's age, skills and ability in this project.

Design Decisions, Advanced (SF 50244)

Any exhibit must have been created or redesigned by the exhibitor as part of their current Interior Design 4-H project. Exhibitors should be knowledgeable about various aspects of the project. Exhibits could include items such as, but not limited to, comparison studies of different products or techniques; made accessories, wall-hangings, window coverings, or furniture items; refinished or redesigned furniture; or a plan to solve some type of interior design problem. Exhibit should be appropriate to the exhibitor's age, skills and ability in this project.

Interior Design Innovation Class (SF 50245)

Open to enrolled in Interior Design.

Demonstrate the skills and knowledge you have gained through the Interior Design project. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Interior Design Ready4Life Challenge (SF 50247)

Open to 11- to 18-year-olds enrolled in the Interior Design project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Interior Design Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

LEADERSHIP

Each county may submit 3 entries total from 50249, 50250, 50251, 50252; 2 entries from 50254; 1 entry from 50255.

Leadership 1 (SF 50249)

Create a binder portfolio with a minimum of four (4) completed activities each year from the areas noted below. Build upon your previous year's work. Photocopies or original pages of the completed activities from the book should be included in the portfolio.

- **First Year** – One activity from each of the following sections: Understanding Self; Communication; and Getting Along with Others, plus one of exhibitor's choice from the manual.
- **Second Year** – One activity from each of the following sections: Getting Along with Others; Learning to Learn; and Making Decisions, plus one of exhibitor's choice from the manual.
- **Third Year** – One activity from each of the following sections: Making Decisions; Managing; and Working with Groups, plus one of exhibitor's choice from the manual.

Leadership 2 (SF 50250)

Building upon your previous work, continue adding to your binder portfolio with a minimum of four (4) completed activities each year from the areas noted below. Photocopies or original pages of the completed activities from the book should be included in the portfolio.

- **First Year** – One activity from each of the following sections: Understanding Self; Communication; and Getting Along with Others, plus one of exhibitor's choice from the manual.
- **Second Year** – One activity from each of the following sections: Getting Along with Others; Learning to Learn; and Making Decisions, plus one of exhibitor's choice from the manual.
- **Third Year** – One activity from each of the following sections: Making Decisions; Managing; and Working with Groups, plus one of exhibitor's choice from the manual.

Leadership 3 (SF 50251)

Building upon your previous work, continue adding to your binder portfolio with a minimum of four (4) completed activities each year from the areas noted below. Photocopies or original pages of the completed activities from the book should be included in the portfolio.

- **First Year** – One activity from each of the following sections: Understanding Self; Communication; and Getting Along with Others, plus one of exhibitor's choice from the manual.
- **Second Year** – One activity from each of the following sections: Getting Along with Others; Learning to Learn; and Making Decisions, plus one of exhibitor's choice from the manual.
- **Third Year** – One activity from each of the following sections: Making Decisions; Managing; and Working with Groups, plus one of exhibitor's choice from the manual.

Leadership Innovation Class (SF 50252)**Open to youth enrolled in Leadership 1, 2, or 3.**

Demonstrate the skills and knowledge you have gained through the Leadership project. **Your exhibit should not fit in the other exhibit options for this project.** The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Leadership Ready4Life Challenge (SF 50255)**Open to 11- to 18-year-olds enrolled in any Leadership project.**

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Leadership Maker (SF 50400)**Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.**

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

Leadership Group Exhibit (SF 50254)

Open to clubs and groups whose members are enrolled in any Leadership project

Exhibit a display illustrating how your group has used the Teens As Leaders model effectively in your club, community, school, or state. Leadership activities might include planning, advising, promoting, mentoring, teaching or advocating for change. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. The display must be accompanied by 3 or more 4-H members at the time of the judge's critique. Club members should make a 5- to 10-minute presentation to the judge. All club members present for the judge's critique should be able to discuss the project and answer questions. Only club members present for judging who participate in the actual critique and presentation are eligible for ribbons and premiums. Due to space limitations, exhibits are limited to 2'6" wide and 15" deep.

NATURE: NATURAL RESOURCES AND OUTDOOR ADVENTURES

Each county may submit 3 entries from 50256, 50257, 50258, 50259; 1 entry from 50267.

Electricity and water are **NOT** available for these displays. **NO live animals or reptiles are permitted in these exhibits.**

Natural Resources 1 (SF 50256)

Exhibit any item developed from the project book, *Step Into Nature*.

Natural Resources 2 (SF 50257)

Exhibit any item developed from the project book, *Explore the Natural World*.

Natural Resources 3 (SF 50258)

Exhibit any item developed from the project book, *Blaze the Trail*.

Outdoor Adventure 1-3 (SF 50259)

Exhibit a display illustrating an activity completed from the project manual.

Natural Resources Ready4Life Challenge (SF 50267)

Open to 11- to 18-year-olds enrolled in any Natural Resources and Outdoor Adventures project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

NATURE: FISHING AND WILDLIFE

Each county may submit 3 entries total from 50260, 50261, 50262, 50266, 50263, 50265; and 1 entry from 50291.

Sportsfishing 1 (SF 50260)

Exhibit a product or display made to complete an activity in the *Take the Bait* project manual. This could include, but is not limited to, displays on: different types of fishing tackle, identifying different baits and their uses (no actual bait, please) or identifying the anatomy of a fish. For safety reasons, lures must be placed in a plastic case.

Sportsfishing 2 (SF 50261)

Exhibit a product or display made to complete an activity in the *Reel in the Fun* project manual. This could include, but is not limited to, displays on: different types of knots or rigs and their use; a collection of fishing lures, labeled with their use; or information on preparing and cooking fish (not recipes). For safety reasons, lures must be placed in a plastic case.

Sportsfishing 3 (SF 50262)

Exhibit a product or display made to complete an activity in the *Cast into the Future* project manual. This could include, but is not limited to, displays on: making artificial flies and lures; researching effects of water temperature; sportsfishing careers; or identifying insects that fish eat. For safety reasons, lures must be placed in a plastic case.

Wildlife 1 (SF 50266)

Exhibit any activity developed from the project manual. Be able to explain the importance of and concept behind the exhibit.

Wildlife 2 (SF 50263)

Exhibit any activity developed from the project manual. (Ex. Create a display of the life history of an animal.) Within the exhibit, explain the importance of and concept behind the exhibit.

Wildlife 3 (SF 50265)

Exhibit any activity developed from the project manual. Be able to explain the importance of and concept behind the exhibit.

Fishing & Wildlife Ready4Life Challenge (SF 50291)

Open to 11- to 18-year-olds enrolled in any Fishing or Wildlife project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Natural Resources Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

Exploring Your Environment 1 (not eligible for state fair)

Prepare a display or poster that illustrates an activity from the project manual. The display should demonstrate an understanding of natural and/or manmade environments, how humans affect the environment, or how the environment affects our lives. Include your project manual that documents activity recordkeeping, your answers to activity questions, and details the exhibitor's thoughts and ideas.

Exploring Your Environment 2 (not eligible for state fair)

Prepare a display or poster that illustrates an activity from the project manual. The display should demonstrate an understanding of one of the following: stewardship of natural resources, investigating greenhouse effects on living organisms, methods of reducing or managing waste in your home or community, or calculating your ecological footprint. Include your project manual that documents activity recordkeeping, your answers to activity questions, and details the exhibitor's thoughts and ideas.

PHOTOGRAPHY

Each county may submit 3 entries total from 50268, 50269, 50270, 50271, 50272; and 1 entry from 50274.

ALL photos in exhibits must have been taken by the exhibitor. Photo/Model releases from individuals

pictured in the exhibitor's photographs are required unless the photograph is of a group in a public place where identification would not be an issue. The release can be obtained at:

<https://4h.extension.illinois.edu/members/projects/photography> . Photos may be taken with a camera, an electronic tablet (i.e. iPad), or a cell phone.

ALL photos (including Photo Editing exhibits) must be accompanied by details of the camera settings that include:

- a. Camera/device used
- b. Aperture (F-stop)
- c. Exposure time (shutter speed)
- d. ISO (film/sensor sensitivity)
- e. Lighting used (flash, artificial, sunlight, other)
- f. Photo editing software/application used (required for ALL edits and retouches except for cropping)
- g. Filters used (lens filters and or digital/software filters)

Members are allowed to shoot on a camera's automatic setting, but should be able to find the metadata information on the photo to discuss the information above.

The exhibition size requirements for all photographs will be:

Minimum image size: 5X7

Maximum image size: 8X10

Maximum exhibit size (including frame): 18X20

All exhibitors must include unframed (taped to the back of the framed exhibit or attached to the project booklet) **un-edited** versions of either the same subject or the examples of the same technique that the framed image represents. This will assist the judge in understanding the choices made by the photographer to build the exhibited composition.

NOTE: Images taken with devices that apply an automatic filter will not be eligible for award.

Photography 1 (SF 50268)

Exhibit one framed photo which demonstrates your understanding of a technique you learned from your Photography 1 project manual. No photo editing is allowed in this class except cropping and red eye removal. Be prepared to show the page in the manual of the technique you are demonstrating.

Photography 2 (SF 50269)

Exhibit one of the options listed below:

- Exhibit one framed 8x10 close-up photograph using the skills learned on page 62-63 of the project manual titled "Bits and Pieces." No photo editing is allowed in this class except cropping and red eye removal; **OR**
- Exhibit one framed 8"x10" photo which demonstrate your understanding of a technique you learned from your Photography 2 project manual. No photo editing is allowed in this class except cropping and red eye removal. Be prepared to show the page in the manual of the technique you are demonstrating.

Photography 3 (SF 50270)

Exhibit one of the options listed below:

- Exhibit one framed 8" x 10" still-life photo that demonstrates good composition, including color, form, texture, lighting and depth of field. No photo editing is allowed in this class except cropping and red eye removal; **OR**
- Exhibit one framed 8"x10" photo which demonstrate your understanding of a technique you learned from your Photography 3 project manual. No photo editing is allowed in this class except cropping and red eye removal. Be prepared to show the page in the manual of the

technique you are demonstrating.

Photo Editing (SF 50271)

Open to members in Photography 1, Photography 2, and Photography 3.

Exhibit one framed 8" x 10" photo that has been altered using digital photo-editing techniques (beyond cropping and red-eye reduction). Include a print of the original photo(s), taped to the back of the photo frame. Photos in which an automatic filter was applied at the time the photograph was taken will not be eligible for award.

Photography Innovation Class: (SF 50272)

Open to youth enrolled in Photography 1, 2, and 3.

Demonstrate the skills and knowledge you have gained through the Photography project. **Your exhibit should not fit in the other exhibit options for this project.** The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned.

Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. All exhibits must include one framed photo illustrative of the work you are presenting.

Photography Ready4Life Challenge (SF 50274)

Open to 11- to 18-year-olds enrolled in any Photography project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Photography Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or**

laser cutting an object without the other specifications does not qualify as a Maker Project). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

PLANTS & SOILS

Plants & Soils 1 (not eligible for state fair)

Prepare a display or poster that illustrates an activity from the project manual. The display should demonstrate an understanding of environmental and internal factors that affect plant growth. Include your project journal that documents activity recordkeeping requirements, answers activity questions, and details personal thoughts and ideas.

Plants & Soils 2 (not eligible for state fair)

Prepare a display or poster that illustrates an activity from the project manual. The display should demonstrate an understanding of the composition of plants, the functions of individual plant parts, plant life cycles, and the many ways plants reproduce. Include your project journal that documents activity recordkeeping, answers activity questions, and details personal thoughts and ideas.

Plants & Soils 3 (not eligible for state fair)

Prepare a display or poster that illustrates an activity from the project manual. The display should demonstrate an understanding of environmental and internal factors that affect plant growth. Include your project journal that documents activity recordkeeping requirements, answers activity questions, and details personal thoughts and ideas.

Plants & Soils Ready4Life Challenge (not eligible for state fair)

Open to 11- to 18-year-olds enrolled in any Plants & Soils project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Plants & Soils Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

ROBOTICS

Each county may submit 3 entries total from 50285, 50286, 50288, 50289, 50292; and 1 from 50293 to the State Fair.

NOTE: If applicable for their class and display, exhibitors must bring their own computers for demonstration purposes; computers will not be provided. Internet access will not be available.

- Exhibits in classes Robotics 1 beginning, 50285, and 50286 are designed to be used with LEGO Mindstorms (NXT or EV3).
- Any other programmable robot kit such as Arduino or Raspberry Pi, should be exhibited under Innovation Open Source class.

Robotics 1: Beginning (not eligible for state fair)

Exhibitors should complete Activities 1-6. Exhibitors will design, build and program a robot that can autonomously follow a predetermined path that changes direction at least 4 times during a single run. They will bring their Robotics Notebook to share what they learned about the engineering design process and programming.

Robotics 1: Intermediate (SF 50285)

Exhibitors should complete Activities 7-12. Exhibitors will design, build and program a robot that uses at least one sensor to autonomously follow a path, respond to, and or avoid obstacles. Exhibitors in this class must use at least one sensor in their robot design. They will bring their Robotics Notebook to share what they learned about the engineering design process and programming.

Robotics 2 (SF 50286)

Exhibitors should complete Activities 1-7. Exhibitors will design, build and program a robot that uses sensors and programming to complete one of the provided challenges. They will bring their robot and Robotics Notebook to share changes they made to the robot and/or program along the way, and to describe their experience with completing the challenge.

Robotics Innovation Open Source Class (SF 50292)

Open to youth enrolled in Robotics 3, but may also include youth in Robotics 1 or 2 if the exhibits meets the guidelines.

Exhibit an original robot, either homemade or a kit that does not fall under Robotics 1 or 2 that can complete a task using MULTIPLE sensors. If a robot kit is used, then some parts of the robot must be built using other components such as wood, plastic or metal. The robot can include any types of motors, pneumatics or sensors. The Innovation class can also be used for LEGO Mindstorms or Vex kits where the exhibit does not fall under Robotics 1 or 2 exhibit option. Autonomous control of the robot may also be achieved using an “open source” platform such as Arduino or Raspberry Pi and can be programmed using a coding language that is publicly available. Exhibitors in Robotics Innovation/Open Source class must bring a detailed engineering notebook that describes how the exhibitor designed, built and programmed the exhibit.

Junk Drawer Robotics All exhibits should be original designs made with everyday objects and materials. Exhibits with purchased kits will not be accepted. Exhibitors are also required to bring their Junk Drawer Robotics Youth Robotics Notebook with the sections completed for the project

they are exhibiting, including the sections leading up to the activity they are exhibiting. For example, if a youth is bringing Activity E from Junk Drawer Level 1, they should have robotics notebook sections A-E completed.

Junk Drawer Robotics 1 (not eligible for state fair)

Exhibit any item from the “To Make” activity from the Junk Drawer Robotics Level 1 Book. Be sure all robotics notebook sections within the module being exhibited are filled in.

Junk Drawer Robotics 2 (SF 50288)

Exhibit any item from the “To Make” activity from the Junk Drawer Robotics Level 2 Book. Be sure all robotics notebook sections within the module being exhibited are filled in.

Junk Drawer Robotics 3 (SF 50289)

Exhibit any item from the “To Make” activity from the Junk Drawer Robotics Level 3 Book. Be sure all robotics notebook sections within the module being exhibited are filled in.

Robotics Ready4Life Challenge (SF 50293)

Open to 11- to 18-year-olds enrolled in any Robotics project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Robotics Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

SHOOTING SPORTS

Each county may submit 2 entries total from 50401, 50402, 50403, 50404, 50405; and 1 from 50406.

Members must be a member of an approved 4-H Shooting Sports Club to exhibit.. All exhibits should be posters or stand-alone items suitable for display to the general public. Stand-alone items have the intent to enhance the discipline such as a quiver, gun case, gun sling, locking cabinet, gun or target stand, sporting clays equipment wagon, etc. Exhibits deemed to be inappropriate by a superintendent will not be displayed.

NOTE: Shooting Sports Displays are prohibited from displaying the following:

- No live ammunition
- No knives or arrow tips (including field points, hunting broadheads, etc.)
- No functional or non-functional bows, firearms or firearm parts that could be reassembled are allowed.
- No humanoid shaped targets or reference to paintball, laser tag, air-soft, or pointing of any type of firearm or bow toward another person is allowed.
- No display involving primarily tactical design firearms (i.e. AR platform or military type firearms)
- No reference or use of the word “weapon” should be used in a display
- Make sure there are no safety violations in your display. (Example: no earplugs or safety glasses in a picture of a person shooting a firearm.)

Shooting Sports: Archery (SF 50401)

Exhibit a poster or stand-alone display depicting safe archery handling, range safety, the parts of the bow, tracking the target, target sighting, or another topic you have learned through the 4-H Shooting Sports program.

Shooting Sports: Rifle (SF 50402)

Exhibit a poster or stand-alone display depicting safe firearm handling, range safety, the parts of the rifle, tracking the target, target sighting, or another topic you have learned through the 4-H Shooting Sports program.

Shooting Sports: Shotgun (SF 50403)

Exhibit a poster or stand-alone display depicting safe firearm handling, range safety, the parts of the shotgun, tracking the target, target sighting, or another topic you have learned through the 4-H Shooting Sports program.

Shooting Sports: Hunting & Outdoor Skills (SF 50404)

Exhibit a poster or stand-alone display related to something you learned in the Hunting & Outdoor Skills project.

Shooting Sports: Pistol (SF 50405)

Exhibit a poster or stand-alone display depicting safe firearm handling, range safety, the parts of the pistol, tracking the target, target sighting, or another topic you have learned through the 4-H Shooting Sports program.

Shooting Sports Ready4Life Challenge (SF 50406)

Open to 11- to 18-year-olds enrolled in any Shooting Sports project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related

career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Shooting Sports Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

SMALL ENGINES

Each county may submit 1 entry total for 50294; and 1 entry for 50297.

Small Engine displays must be no larger than 4' x 4' display board. Exhibits must be portable. No complete engines, lawn tractors, tillers, chainsaws, etc. are permitted for display. No electrical power is available for displays/exhibits.

Small Engines 1-3 (SF 50294)

Exhibit a display, selecting one of the following items:

- **Ignition System:** Identify the parts of the Ignition System and explain how magnetic energy is produced through the ignition system to ignite the spark plug.
- **Compression System:** Explain how heat energy is produced by an engine and converted into mechanical energy.
- **Heat Transfer:** Explain how heat is transferred through the cooling and lubrication system of an air cooled or water cooled engine.
- **Filter Maintenance:** Explain the proper maintenance and cleaning of the air, fuel and oil filters of an engine.
- **What does a serial number reveal?:** Explain the various information that can be learned from the serial number or identification number stamped on the shroud of a Briggs & Stratton engine.
- **Tools to do the job:** Identify and explain the function(s) of different specialty tools needed for small engine work.

- **Experimentation:** Explain through illustration an experiment you conducted from the project manual showing the results of your work.

Small Engines Ready4Life Challenge (SF 50297)

Open to 11- to 18-year-olds enrolled in any Small Engines project,

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Small Engines Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

TECHNOLOGIES

3-D PRINTING & DESIGN: Choose one of the following classes based on your interest and skill level.

3-D Design Beginner (not eligible for State Fair)

No 3-D Printer or 3-D printed object is required for this exhibit. Exhibit a simple 3-D rendered design using Computer Aided Design (CAD) Software such as Tinker CAD or Inventor. The design must be an object that performs a specific task, and may not be based on already existing 3-D models. It must be able to be 3-D printed. Any CAD software can be used, but files must be in .STL format. Bring your design on a Jump Drive to be viewed for judging. Exhibits in this class may not have multiple parts, doors, hinges, or any sort of mechanics.

Exhibitors are expected to use the engineering design process to complete their designs. This process is important to the outcomes and exhibitors must keep a log outlining the step-by-step notes, sketches, and documentation from throughout the design process. The logbook should define

the problem that is being solved/use of the object and describe in detail each step of the Engineering Design Process taken during the creation of the invention.

3-D Design Advanced (not eligible for State Fair)

Exhibitors are expected to go above and beyond those expectations set in 3-D design beginner. No 3-D Printer or 3-D printed object is required for this exhibit. Exhibit a complex 3-D rendered design using Computer Aided Design (CAD) Software such as Tinker CAD or Inventor. The design must be an object that performs a specific task, and may not be based on already existing 3-D models. It must be able to be 3-D printed. Any CAD software can be used, but files must be in .STL format. Bring your design on a Jump Drive to be viewed for judging. Exhibits in this class **MUST** not have multiple parts, doors, hinges or some sort of mechanistic feature to accomplish a specific task.

Exhibitors are expected to use the engineering design process to complete their designs. This process is important to the outcomes and exhibitors must keep a log outlining the step-by-step notes, sketches, and documentation from throughout the design process. The logbook should define the problem that is being solved/use of the object and describe in detail each step of the Engineering Design Process taken during the creation of the invention.

3-D Printing Beginner (not eligible for State Fair)

Exhibit a simple 3-D printed object designed using Computer Aided Design (CAD) Software such as Tinker CAD or Inventor. The 3-D printed object must perform a specific task, and may not be based on already existing 3-D models. It must be 3-D printed using **ONLY A COMMERCIALY AVAILABLE HOME/DESKTOP 3-D PRINTER**. In addition, original design files must accompany each exhibit. These files must be in .STL format. Bring your design on a jump drive to be viewed for judging. Exhibits in this class may not have multiple parts, doors, hinges or any sort of mechanics.

Exhibitors are expected to use the engineering design process to complete their designs. This process is important to the outcomes and exhibitors must keep a log outlining the step-by-step notes, sketches, and documentation from throughout the design and print process. The logbook should define the problem that is being solved/use of the object and describe in detail each step of the Engineering Design Process taken during the creation of the invention.

3-D Printing Advanced (not eligible for State Fair)

Exhibitors are expected to go above and beyond those expectations set in 3-D Printing beginner. Exhibit a Complex 3-D printed object designed using Computer Aided Design (CAD) software such as Tinker CAD or Inventor. The 3-D print must be an object that performs a specific task, and may not be based on already existing 3-D models. Exhibits in this class **MUST** have multiple parts, doors, hinges or some sort of mechanical feature. It must be 3-D printed using **ONLY A COMMERCIALY AVAILABLE HOME/DESKTOP 3-D PRINTER**. In addition, original design files must accompany each exhibit. These files must be in .STL format. Bring your design on a Jump Drive to be viewed for judging.

Exhibitors are expected to use the engineering design process to complete their designs. This process is important to the outcomes and exhibitors must keep a log outlining the step-by-step notes, sketches, and documentation from throughout the design and print process. The logbook should define the problem that is being solved/use of the object and describe in detail each step of the Engineering Design Process taken during the creation of the invention.

3-D Printing & Design Ready4Life Challenge (not eligible for State Fair)

Open to 11- to 18-year-olds enrolled in any 3-D project

Exhibits in this category must include the following: a) a physical representation of the career or

business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

3-D Print & Design Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

UNMANNED AERIAL VEHICLES/SYSTEMS (DRONES):

Choose one of the following classes based on your interest and skill level.

UAV Display (not eligible for State Fair)

Prepare a display related to the Drones/UAV project on the topic of your choosing. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. Non-UAV/ Drone projects should not be entered in this class.

UAV Unmanned Aerial Systems (not eligible for State Fair)

Exhibit one Unmanned Aerial Vehicle and associated system assembled or made by the member. UAV or Drone exhibits in this class must be either originally designed or built from a kit of reconfigurable parts and components. These displays are limited to multicopters (tri, quad, hex, and octocopters), as well as FPV airplanes and flying wings with wingspans up to 36". The UAV **MUST** have a Flight Controller and utilize a camera/video transmission system. The exhibit will be a static display. The Drone should be in good flying condition with batteries fully charged, and all UAS components (including Video System) ready to demonstrate. **DO NOT** display your UAV with the

propellers on, but rather on the table to the side of your UAV. The Drone will not be flown unless the weather permits, and flights have been approved by the local FAA/Air Traffic Control Tower. Attach the printed directions of the UAV if any were used.

UAV Ready4Life Challenge (not eligible for State Fair)

Open to 11- to 18-year-olds enrolled in any UAV project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

UAV Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

THEATRE ARTS

Each county may 3 entries total for 50299, 50301, 50302; and 1 entry for 50304.

Theatre Arts 1 (SF 50299)

Exhibit one of the following items:

- Portfolio of acting activities completed during the current year (A video of performances is not considered a portfolio and will not be accepted for exhibit.); **OR**
- Display illustrating a drawing/photograph of a clown character created by the exhibitor; **OR**
- Display illustrating a picture story developed by the exhibitor.

Theatre Arts 3 (SF 50301)

Exhibit one of the following items:

- Portfolio of activities for set design; make-up; or sound, props, or costuming completed

during the current year; **OR**

- Display that includes sound, props and costume charts appropriate for a selected scene from a story or play (limited to no more than 8 items); **OR**
- Display a scenic design model to depict a scene from a script; **OR**
- Display illustrating a character with make-up drawn or colored in. Include a photograph of a person wearing the make-up and information on the character's personality or part in the play.

Theatre Arts Innovation Class (SF 50302)

Open to youth enrolled in Theatre Arts.

Demonstrate the skills and knowledge you have gained through Theatre Arts project. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Theatre Arts Ready4Life Challenge (SF 50304)

Open to 11- to 18-year-olds enrolled in any Theatre project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Theatre Arts Maker (SF 50400)

Open to youth in all projects. Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is

also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

TRACTOR

Each county may submit 2 entries total for 50306, 50307, 50308, 50309, 50310; and 1 entry for 50312.

Tractor A (SF 50306)

Exhibit a display or poster that illustrates one of the following topics: tractor safety; care and maintenance; the tractor as a valuable farm machine; or an activity listed in the project manual.

Tractor B (SF 50307)

Exhibit a display or poster that illustrates one of the following topics: cause and prevention of rollovers, diagram how an air cleaner works, diagram & identify an engine cooling system, regulations for battery & oil disposal, or another activity listed in the 4-H project manual.

Tractor C (SF 50308)

Exhibit a display or poster that illustrates one of the following topics: wagon and bin hazards, diagram and identify open and closed hydraulic systems, mower types and safety features conveyor types and safety features, or another activity listed in the 4-H project manual.

Tractor D (SF 50309)

Exhibit a display or poster that illustrates one of the following topics: method of winterizing a tractor, chemical uses and required safety equipment, parts and process of internal combustion engine, procedure for cleaning and flushing tractor radiator, or another activity.

Tractor Innovation Class (SF 50310)

Open to youth enrolled in Tractor A, B, C or D.

Demonstrate the skills and knowledge you have gained through the Tractor project. This could be related to, but not limited to, advancements in technology, enhancements to crop production, or a topic of interest to the member related to tractors or farm machinery. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Tractor Ready4Life Challenge (SF 50312)

Open to 11- to 18-year-olds enrolled in any Tractor project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Tractor Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit

into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

VETERINARY SCIENCE

Each county may submit 1 entry total from 50320; and 1 entry from 50322.

Veterinary Science (SF 50320)

(Open to youth in Veterinary Science 1, Veterinary Science 2, and Veterinary Science 3)

Prepare a display focusing on any activity related to the veterinary science project. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. Live animals are not permitted as exhibits in this area. For safety reasons, exhibits cannot include glass, syringes with needles or any other sharp objects. Exhibits may include activities from Veterinary Science projects OR from any other Animal project area

Veterinary Science Ready4Life Challenge (SF 50322)

Open to 11- to 18-year-olds enrolled in any Veterinary Science project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business

exploration and pursuit above the workmanship of the physical specimen on display.

Vet Science Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

VIDEO/FILMMAKING

Each county may submit 3 entries total from 50324, 50325, 50326, 50327, 50328; and 1 entry from 50330. Enrollment in the Video project is required to exhibit in the classes in this section.

All Exhibitors must bring their video to be judged on a USB flash drive and saved in .MP4 format.

Exhibitors are encouraged to post their video on YouTube.com in advance of State Fair. Exhibitors may choose whether to make the video “public, unlisted” (someone must have the link to view it), or “private” (only people you choose may view it). This will allow fairgoers to view the exhibits on display. There will be monitors at the exhibit table for viewing videos so exhibitors will **NOT** need to bring a laptop or device for viewing.

Requirements that apply to ALL video classes:

Video submissions should be no longer than five (5) minutes in length (unless noted differently in class description.). Videos are to be original and a result of the member’s current year’s work. Criteria for judging shall include: (1) Evidence of story line; (2) Use of camera angles; (3) Use of zooming techniques; and (4) Smoothness of scene changes. Image and sound quality will be considered in relation to equipment available to and used by exhibitor. All videos should comply with copyright regulations and display an image that is appropriate for 4-H audiences. No time or date should be imprinted on the video footage. All videos should include an opening title screen, as well as closing credits which include date of production, name of video exhibitor and research sources if appropriate. **All Video/Filmmaking exhibitors must include a printed copy of materials which will remain on display.**

Commercial or Promotional Video (SF 50324)

Prepare a short video (30 seconds to 1 minute in length) that promotes an event, advertises a specific project/product, or is a public service announcement. The video should demonstrate skills in making and editing video.

Animated Video (SF 50325)

Video in this class should represent creative animation of original artwork created by the exhibitor and may include stop motion techniques. Media might include images created with graphics software or hand-drawn images.

Documentary (SF 50326)

Video in this class should represent a research-based investigation into a topic of choice. Video credits should list research sources and may include paper or electronically published materials, as well as, and/or interviews with experts or constituents related to the topic of investigation.

Short Story or Short Narrative (SF 50327)

Prepare a short video that tells a story. The video should demonstrate skills in making and editing video.

Video/Filmmaking Innovation Class (SF 50328)**Open to youth enrolled in Video/Filmmaking**

Demonstrate the skills and knowledge you have gained through the Video project. **Your exhibit should not fit in the other exhibit options for this project.** The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. Your exhibit should not fit in the other exhibit options for this project. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Video/Film Ready4Life Challenge (SF 50330)**Open to 11- to 18-year-olds enrolled in any Video/Film project.**

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Video Maker (SF 50400)**Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.**

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)

- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

VISUAL ARTS

Each county may submit one entry from these projects:

- Food Decorating (1 total from 50332, 50333, 50334, 50335)
- Chalk/Carbon/Pigment on wood, metal or textiles (Division B) 50352
- Clay 50337
- Computer-Generated Art 50338
- Fiber 50339
- Fiber Non-Original Ages 8-10 Only 50350
- Glass/Plastic 50340
- Heritage Arts 50341
- Leather 50321
- Metal 50342
- Nature 50343
- Paper 50344
- Scrapbooking (1 total from 50345, 50346, 50347)
- Three-Dimensional Design/Mixed Media 50348
- Wood 50349
- Ready4Life 50351

Each county may submit two entries from Chalk/Carbon/Pigment on canvas, paper or glass (Division A) 50336

Exhibitors must be enrolled in the Visual Arts project category in which they are exhibiting.

Exhibitors are encouraged to date the project when it is made. All visual arts exhibits are evaluated using a visual arts rubric which takes into account correct use of design elements; craftsmanship; and creativity.

Articles exhibited must be an original design created by the exhibitor (except in heritage arts which may follow a pattern **AND** Fiber-Non Original Ages 8-10 **ONLY**). Copyrighted or trademarked designs are not acceptable; this includes Team or School logos. Kits and preformed molds are not considered original and are not acceptable in any Visual Arts Class. Combining parts of different patterns (pictures, photographs, images from the internet or a magazine) with the member's own ideas can result in an original design, but simply changing the color, pattern and/or size of a pattern does **NOT** make the design original. This also applies for ideas found on a site such as Pinterest. If you see something on Pinterest that you like, use the concept and create something different using the concept; however if it **MUST NOT** look exactly like something the judge can search for and find on Pinterest. The exhibit must combine parts of different patterns and/or ideas with the concepts of the member, however changing the color or changing the size of the item or pattern used does **NOT** make it original. If you create a replica of what you see somewhere else, it is not your original

design. If a photo, sketch, or other idea source was used, submit it with your entry, firmly attached to your exhibit. Be prepared to explain how and where you got the idea for this project.

Members wishing to exhibit quilts made from a pattern may enter it in Heritage Arts. Quilts exhibited in the Visual Arts – Heritage Arts area will be evaluated using a visual arts rubric which takes into account correct use of design elements; craftsmanship; and creativity. All work on the quilt **MUST** be completed by the 4-H member. You cannot exhibit a quilt that was quilted by someone else.

Visual Arts Food Decorating Beginning (SF 50332)

Exhibit one of the following:

- Exhibit four decorated cookies, using a minimum of four different techniques. Exhibit may use cookies OR cookie forms.
- Exhibit four decorated cupcakes, using a minimum of four different techniques. Exhibit may use cupcakes OR cupcake forms.
- Exhibit a single layer decorated cake, using a minimum of four different techniques. Exhibit may use cake OR cake form.

Visual Arts Food Decorating Intermediate (SF 50333)

Exhibit one of the following:

- Exhibit four decorated cookies, using a minimum of five Level 2 techniques. Exhibit may use cookies OR cookie forms.
- Exhibit four decorated cupcakes, using a minimum of five Level 2 techniques. Exhibit may use cupcakes OR cupcake forms.
- Exhibit a single layer or two-layer cakes, using a minimum of five Level 2 techniques. Exhibit may use cake OR cake form.

Visual Arts Food Decorating Advanced (SF 50334)

Exhibit a decorated, stacked and/or tiered cake, using a minimum of four Level 3 techniques. Exhibit may use cake OR cake form.

Visual Arts Food Decorating Master (SF 50335)

Exhibit to include a one-page written description of your project, including goals, plans, accomplishments, and evaluation of results. Include up to four pictures of your accomplishments **AND** exhibit an original design decorated cake using more than five techniques. Exhibit may use cake OR cake form.

Visual Arts Chalk/Carbon/Pigment: Enter the division based on the type of material on which the art was created.

Division A: Canvas, Paper, Glass: (SF 50336)

Any original art work done with pencils, chalk, pens, ink, paint, charcoal, dyes, etc. on canvas, paper, or glass. This would include all painting, sketching, drawing, cartooning, printing, etc. Painted and/or glazed pre-formed ceramics and painted porcelain dolls are not eligible for State Fair exhibit. Drawings and paintings should be matted or framed under glass. (Exceptions: Oil and acrylic paintings do not require glass and are not required to be matted.) Water color, chalk, pen & ink, computer-generated art, etc. do require some protective covering. Gallery frames are acceptable. Canvas paintings that continue “over the edges” are acceptable without frames; however, the piece must still be prepared for hanging. Matted pieces without frames are acceptable, however the piece must be prepared for hanging OR it must include a photo of the artwork being displayed in a non-hanging manner. There is no specific requirement for the type of mat used.

Division B: Wood, Metal, Textiles: (SF 50352)

Any original art work done with pencils, chalk, pens, ink, paint, charcoal, dyes, etc., on wood, metal, or textiles. Painted and/or glazed pre-formed ceramics and painted porcelain dolls are not eligible for State Fair exhibit. Any exhibits created as a piece of wall art must be prepared for hanging.

Visual Arts Clay: (SF 50337)

Any original item made of clay; may be fired or unfired, hand formed or thrown on a wheel. Self-hardening clays are fine. Fire/oven-cured and cornstarch clay could be accepted. Items can include, but are not limited to, clay statues, bowls, jewelry, etc. Pre-formed ceramics are not eligible for State Fair exhibit.

Visual Arts Computer-Generated Art: (SF 50338)

Any original art created in any software package. Exhibit may not include scanned work, clip art, downloaded images from the internet, any imported image, or photographs. All pixels must be original. Photo mosaics are NOT allowed. Exhibitors in this class (like all other classes in this sub-section) must be enrolled in Visual Arts; Computer project enrollment is not required. NOTE: Wood and metal exhibits created through the use of laser cutting programs/devices should be entered in this class. Plastic exhibits with an artistic focus created using a 3-D printer should be entered in this class. If the art created is designed to hang, then the entry should have some protective covering, such as a glass frame, and prepared for hanging. If the art is something that has been created with a laser cutting program/device and is NOT designed to hang, it does not require protective covering nor does it need to be prepared to hang.

Visual Arts Fiber: (SF 50339)

Any original item made of fiber. Examples are quilts, fabric collage, soft sculpture, stitchery, weaving, embroidery, cross-stitch, wearable art, hooking, braiding, duct tape artistry, and baskets. **Original** cross-stitched, knitted, crocheted or quilted items belong in this Fiber class. **Non-original** cross-stitched, knitted, crocheted or quilted items should be entered in Heritage Arts. Machine knitted items are not appropriate for this class.

Visual Arts Fiber Non-Original AGES 8-10 ONLY: (SF 50350)

Any non-original item made of fiber. Examples are fabric collage, soft sculpture, stitchery, weaving, embroidery, cross-stitch, crocheting, knitting, weaving, hooking, and felting. Exhibitors may use a pattern and/or an idea generated from another source.

Visual Arts Glass/Plastic: (SF 50340)

Any original item made of glass or plastic. Possible items to exhibit include stained glass, etched glass (original design), mosaics made of glass, glass beading, plastic jewelry (friendly plastic). Interlocking building block creations (i.e. LEGOS) are not suitable for State Fair entry. Stepping stones or wall hangings that include cement decorated with glass or plastic items are not suitable for this class.

Visual Arts Heritage Arts: (SF 50341)

Exhibit an item of **traditional** art learned from another person or **from a pattern** (NO KITS) may be entered in this class. Non-original cross-stitched, knitted and crocheted items by pattern fit in this class. ALL ORIGINAL cross-stitched, knitted and crocheted items should be exhibited in Fiber Arts; (machine knitted items ARE NOT acceptable for this class.) Other possibilities include: needlepoint, counted cross-stitch, crewel, embroidery, cut work, hardanger (embroidery openwork), macramé, baskets, candles, pysanki (decorated eggs), leather, quilts, baskets (made using a traditional pattern), traditional handmade dolls with handmade costumes, or candles. No machine quilting

allowed in Heritage Arts. Exhibitors must also bring 1) the pattern or a copy of the pattern they used to create their traditional art; and 2) a description of the traditional origins of their art choice.

Visual Arts Leather: (SF 50321)

Exhibit one of the following options using leather.

- Leather: Stamping: Exhibit should utilize one or more stamping techniques – exhibit examples include items such as belt; coasters; bookmark; key chain; wrist bracelet.
- Leather: Carving or Tooling: Exhibit should use simple swivel knife tooling techniques or may incorporate several swivel knife-tooling designs or patterns – exhibit examples include items such as belt; pictorial carving; key case.
- Leather: Lacing: Exhibit to include stamping and/or carving techniques incorporated with lacing techniques – exhibit examples include items such as wallets; purses; etc.
- Leather: Stitching: Exhibit may include stamping; carving and/or lacing techniques and should be a leather item or article of apparel, which incorporates hand-sewing techniques.

Visual Arts Metal: (SF 50342)

Any original item made of metal such as sculpture, tin punch, engraved metal, and jewelry. Items intended for industrial use (as tools and/or shop items) are not considered part of this Visual Arts project and are not eligible for entry. Metal items that have been partially or totally created through the use of laser cutting programs/devices should be entered in Computer-Generated Art.

Visual Arts Nature: (SF 50343)

Any original item made of natural material such as wreaths, cornhusk dolls, etc. Items should be made of natural materials (which may be purchased) but securing elements such as glue and wire may be used in the inner construction as long as they do not detract from the overall "natural" appearance. Articles such as dried pressed flowers may be displayed under glass since it is necessary for protection/preservation of the natural materials. Candles are not suitable as entries. All baskets should be entered in Heritage Arts.

Visual Arts Paper: (SF 50344)

Any original item made of paper. Examples could include origami; greeting cards; paper-cut designs, paper mache, hand-made paper, paper collage, paper models of architecture, quilling, etc. Paper twist articles, made from directions in craft books and stores ARE NOT original and are not appropriate for this class. Scrapbooks should be exhibited in Visual Arts Scrapbooking.

Visual Arts Scrapbooking, Beginning: (SF 50345)

Exhibit one album or notebook, either 8 ½" x 11" or 12"x12", with a front and back cover. The album/notebook must have a minimum of 4 pages (front and back, 8 sides), exhibited in page protectors. "Embellishments" are defined as the decorations or special details and features that add to a page and make it more visually appealing. Embellishments may include, but are not limited to, ribbon, clips, special lettering, etc. Beginners must use a minimum of four embellishments and tell a story with pictures.

Visual Arts Scrapbooking, Intermediate: (SF 50346)

Exhibit one album or notebook, either 8 ½" x 11" or 12"x12", with a front and back cover. The album/notebook must have a minimum of 4 pages (front and back, 8 sides), exhibited in page protectors. "Embellishments" are defined as the decorations or special details and features that add to a page and make it more visually appealing. Embellishments may include, but are not limited to, ribbon, clips, special lettering, etc. Intermediate level exhibitors must use a minimum of eight embellishments and tell a story with pictures and journaling.

Visual Arts Scrapbooking, Advanced: (SF 50347)

Exhibit one album or notebook, either 8 ½" x 11" or 12"x12", with a front and back cover. The album/notebook must have a minimum of 4 pages (front and back, 8 sides), exhibited in page protectors. "Embellishments" are defined as the decorations or special details and features that add to a page and make it more visually appealing. Embellishments may include, but are not limited to, ribbon, clips, special lettering, etc. Advance level exhibitors must use a minimum of 12 embellishments and tell a compelling story with pictures, journaling, and other media.

Visual Arts Three-Dimensional Design/Mixed Media: (SF 50348)

Art pieces in this class must be comprised of **at least three different media**. No one medium can make up more than 40% of a piece. The piece should **be either freestanding or should be prepared to be hung**. It must be observable on at least three different sides. Originality and design are important concepts. Craft and preformed or assembled projects are not acceptable.

Visual Arts Wood: (SF 50349)

Any original item made of wood (wood carving, sculpture, collage, wood burning, etc.). Utilitarian wood items made from patterns or kits (e.g. outdoor or indoor furniture, shelves) should be entered in woodworking, not in visual arts. Popsicle stick crafts are not acceptable for State Fair entry. Wood items that have been partially or totally created through the use of laser cutting programs/devices should be entered in Computer-Generated Art. All Visual Arts Wood exhibits **MUST** have an artistic element that the exhibitor can explain. Furniture built by the exhibitor aligns with the Woodworking project area – unless the element to be judged is wood carving or wood burning that is one element of the exhibit. Exhibits will be judged using a Visual Arts Rubric and not a woodworking construction rubric.

Visual Arts Ready4Life Challenge: (SF 50351)**Open to 11- to 18-year-olds enrolled in any Visual Arts project.**

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Visual Arts Maker (SF 50400)**Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.**

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogrammed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.

- All parts and software used in the design/build MUST be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are HIGHLY encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also HIGHLY encouraged that exhibits use Open Source Software and/or Hardware in the build.

WEATHER

Each county may submit 1 entry total 50392, 50393, 50394; and 1 entry from 50395.

Weather and Climate Science I (SF 50392)

Exhibit any product or display illustrating an activity from the book. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Weather and Climate Science 2 (SF 50393)

Exhibit any product or display illustrating an activity from the book. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Weather and Climate Science 3 (SF 50394)

Exhibit any product or display illustrating an activity from the book. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period.

Weather Ready4Life Challenge (SF 50395)

Open to 11- to 18-year-olds enrolled in any Weather and Climate project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Weather Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

WELDING

Each county may submit 2 entries total from 50353; and 1 entry from 50355.

Welding (SF 50353)

This exhibit class is open to members who are in the 7th grade and higher. Exhibit one Arc weldment/item demonstrating the skill level of the exhibitor. Members new to the project should consider selecting a weldment from the suggested *Weldment List* found on page 43 of *Arcs and Sparks* (4-H 573 – Shielded Metal Arc Welding). **This class is for industrial welding only.** (Members that wish to use welding to create objects with an artistic appeal should consider enrolling in the 4-H Visual Arts project and consider entering those types of exhibits in the Visual Arts – Metal class.) Exhibits must be portable and cannot be exhibited on a trailer.

Welding Ready4Life Challenge (SF 50355)

(Open to 11- to 18-year-olds enrolled in any Welding project)

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Welding Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

WOODWORKING

Each county may submit 2 entries total from 50357, 50358, 50359, 50360; and 1 entry from 50362.

Woodworking 1 (SF 50357)

Any item made of wood constructed or refinished by the member, appropriate for their age, skills and ability in this project. Pre-cut kits assembled by the member are not acceptable. Exhibits must be portable and cannot be exhibited on a trailer.

Woodworking 2 (SF 50358)

Any item made of wood constructed or refinished by the member, appropriate for their age, skills and ability in this project. Pre-cut kits assembled by the member are not acceptable. Exhibits must be portable, and cannot be exhibited on a trailer.

Woodworking 3 (SF 50359)

Any item made of wood constructed or refinished by the member, appropriate for their age, skills and ability in this project. Pre-cut kits assembled by the member are not acceptable. Exhibits must be portable, and cannot be exhibited on a trailer.

Woodworking 4 (SF 50360)

Any item made of wood constructed or refinished by the member, appropriate for their age, skills and ability in this project. Pre-cut kits assembled by the member are not acceptable. Exhibits must be portable, and cannot be exhibited on a trailer.

Woodworking Ready4Life Challenge (SF 50362)

Open to 11- to 18-year-olds enrolled in any Woodworking project

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Woodworking Maker (SF 50400)

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do)
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

CLOVERBUDS (not premium eligible or State Fair eligible)

Cloverbud members may bring projects from the following categories to the General Show to exhibit and will be provided an opportunity to discuss their projects with an older youth or adult. Each member who shows a project will receive a Cloverbud Participation Ribbon.

Aerospace – Pre-Flight
Embryology 1
Communicative and Expressive Arts
Exploring Farm Animals
See Them Sprout

Bicycling for Fun
Exploring – Treasures of 4-H
Craft Beading
Science and Technology Clubs
From Airedales to Zebras

4-H General Show Absentee Form

Directions

This form takes the place of a member not able to attend the General Show.

Complete this form for each project.

Please answer all questions and be descriptive in answers.

Name: _____

Age: _____

Club: _____

Project: _____

Judging Questions:

1. Why did you choose this project?
2. What were your goals for this project?
3. How did you improve your skills?



University of Illinois | U.S. Department of Agriculture | Local Extension Councils Cooperating
University of Illinois Extension provides equal opportunities in programs and employment.

PREMIUM GUIDE

Projects are valued on a **point system** based on grades of A, B & C. The base is A=5, B=4, C=3. Some more difficult and time-consuming projects are given higher values, such as A=15 B=10, C=5. The dollar amount is then calculated using an X factor, which depends upon the total premium dollars allowed by the State of Illinois. Each individual is eligible for premiums for up to 12 exhibits, with a maximum of 3 exhibits per project area.

Following is a list of projects and the point value assigned:

4, 3		Health	5, 4, 3
Agriculture General	6, 5, 4	Horse & Pony	15, 10, 5
Aerospace	5, 4, 3	Horticulture/Floriculture	6, 5, 4
Beef	15, 10, 5	Intercultural	5, 4, 3
Bicycle	5, 4, 3	Interior Design	5, 4, 3
		Leadership	5, 4, 3
		Maker	6, 5, 4
		Natural Resources	5, 4, 3
		Photography	5, 4, 3
		Plant & Soil Science	6, 5, 4
		Poultry	6, 5, 4

Cat Care	5, 4, 3
Child Development	5, 4, 3
Civic Engagement	5, 4, 3
Clothing & Textiles	6, 5, 4
College & Career Readiness	5, 4, 3
Collections	5, 4, 3
Communications	5, 4, 3
Computer Science	5, 4, 3
Consumer Education	5, 4, 3
Crops	6, 5, 4
Dairy	15, 10, 5
Dog	5, 4, 3
Electricity	5, 4, 3
Entomology	5, 4, 3
Exploratory	5, 4, 3
Family Heritage	5, 4, 3
Foods & Nutrition	6, 5, 4
Forestry	5, 4, 3
Geology	5, 4, 3
Geospatial	5, 4, 3
Goats	12, 8, 5

"The Department of Agriculture shall use its best efforts to secure sufficient appropriations to fund premiums. In any year for which the General Assembly of the State of Illinois fails to make an appropriation sufficient to pay such premiums, premium amounts may not be accurately reflected in this Premium Book

Livestock



LIVESTOCK POLICIES AND PROCEDURES

1. 4-H members planning to exhibit livestock at the Fair must own and care for their animals by the dates listed below. Livestock Ownership Forms must be turned in to the Extension Office by the following dates:

Beef and Dairy-- February 1

Swine, Sheep and Goats-- April 15

Horses, Rabbits and Poultry-- June 1

2. Necessary health papers will be turned in to the Livestock Superintendent or 4-H Program Coordinator by 7:00pm on Sunday, July 12. The Fair veterinarian will check health papers on Sunday evening. Health papers will be maintained in the Fair office and may be picked up any time after Thursday (last day of fair).

3. The Fair Veterinarian has final decision on any animal leaving early for health reasons. If an animal is sick or someone has a concern about an animal, contact the Head Superintendent of that species who will contact 4-H Program Coordinator and Veterinarian. If an animal leaves without these procedures, being followed all awards and premiums will be forfeited. Fair veterinarian must make final decision.
4. No drugging of animals. This was in your Ethics Certification and will not be allowed. The natural state of the animals should not be altered in any way.
5. Superintendents may request that a 4-H member tie up an uncontrollable animal if it is in the ring. The judge may use his own discretion about placing the animal.
6. Parents are **not allowed** in the **show ring or judging area**. Superintendents and show assistants will provide needed help.
8. All 4-H members must have completed the QAEC test online. This will only have to be done once in the lifetime of the exhibitor. Completion of this testing will be checked by online list. Testing must be completed by **MAY 1** of the current year. <http://web.extension.illinois.edu/qaec>
9. YQCA testing is required to be completed by **May 1**, every year that a 4-H member exhibits any of the following animals at the Fair: Beef, Dairy, Swine, Sheep, Goats, Poultry and Rabbits.
10. The maximum number of market animals a 4-H member can show is:
 - 1 poultry fryer pen
 - 1 rabbit fryer pen
 - 1 sheep wether
 - 3 goat wethers
 - 4 steers
 - 5 barrows and or 4 gilts—total of nine swine animals.
12. All animals must be castrated by weigh in; if not, they will not be shown or sold. . This is only for steers, barrows, goat wethers and sheep wethers.
13. These rules are subject to change, 4-H members will be notified of any changes.

LIVESTOCK AUCTION RULES

1. Steers, barrows, sheep wethers, goat fat wethers, rabbit meat pen of three and poultry meat pen of three may be sold at the Youth Auction. An “A” animal takes priority over “B” animals and Grand Champion, Reserve and 3rd place takes first priority followed by showmanship winners.
2. Franklin County youth who are members of 4-H may sell only one (1) animal at the Auction. 4-H members/Youth must be present to Auction.
3. Each Auction participant is encouraged to invite 5 potential buyers. **This is your responsibility.**
4. Minimum weight limit before shrink for the auction animals are:
 - 900 lbs. for steers
 - 90 lbs. for lamb wethers

210 lbs. for barrows and gilts
40 lbs. for goat wethers

5. Order of sale will be as follows for the current year:

Rabbits & Poultry
Goats
Sheep
Swine-barrows and gilts
Steers

6. Youth will be responsible for their animal sold in the auction until it is delivered. Should an animal die before delivery, the buyer will pay the premium and the 4-H member will stand the loss of the animal.

7. **Auction participants must stay** and help with clean-up after the auction and wait to make sure their animal has been loaded.

--Poultry and Rabbit auction participants --Either deliver your pens of three to the buyer or take back home if they do not want. Please have something available for the buyers to use if they want to take them home.

--Steer auction participants—check with Head Beef Superintendent for instructions. There will be a special tie pen to hold until load out.

--Goat & Sheep auction participants—please deliver your animal to the specially marked auction pen.

--Swine auction participants—please stay until the auction is over to make sure your animal is loaded in the correct trailer.

--**EXTRA ANIMALS**--If you have extra animals that you would like to go to the sale barn or for processing, it is **YOUR** responsibility to make sure the right animal gets on the right truck at the right time. Please make your own arrangements with the Head swine superintendent where your extra animals will be going.

8. An animal may only be in the 4-H/ Youth Auction one time in its lifetime.

9. To be eligible to sell livestock, youth must be enrolled in 4-H, an achievement member or a first year member. **To be an achievement member you must have attended 5 club meetings or county/Unit events this 4-H year, give a talk or demonstration this year, and turned in records to the Extension Office last year.** The Franklin County Extension & Support Committee will be checking with the Franklin County 4-H Program Coordinator to make sure all criteria has been met.

10. All livestock sellers will be charged a commission on animals sold, this is in addition to the plaque, photo and any shipping charges. Percentage will be determined at a later date.

11. A show reserve must be stated at weigh in. All animals in the auction must be available for the buyer to process. The youth may put a reserve on an animal for showing purposes only. All risks and expenses are assumed by the youth if they keep the animal for showing purposes. Animals must be delivered by August 25, 2020.

12. Youth must bring a signed receipt from the buyer proving that the “thank you” plaque has been delivered before the Auction check can be issued. The Auction check will not be issued until the Buyer has paid in full.

Exhibition Animal Health Requirements

For Health Requirement Information, please contact:

Illinois Department of Agriculture Bureau of Animal Health and Welfare State Fairgrounds

P.O.Box 19281 Springfield, IL 62794-9281 Phone (217) 782-4944

**CERTIFICATES OF VETERINARY INSPECTION AND/OR TEST RECORDS MUST BE AVAILABLE FOR INSPECTION
AT ANY TIME WHILE ANIMALS ARE ON THE FAIRGROUNDS.**

2019 GENERAL HEALTH REQUIREMENTS For Illinois State Fair and Du Quoin State Fair and County Fairs

Health Certificate of Veterinary Inspection: The term "Health Certificate" or "Certificate of Veterinary Inspection" (CVI) means a legible record, made on an official form of the state of origin, issued by an accredited veterinarian, which shows that the animals listed thereon meet the health requirements of the state of destination.

These Exhibition Health Requirements apply to all livestock present at the fair including those animals that are not entered in competitive events.

1. Must accompany animals, except as noted, and be available on request by Animal Health Officials

All out-of-state animals shall require an entry permit. Entry permit numbers are available by calling the Illinois Department of Agriculture, Monday through Friday from 8:00 AM to 4:30 PM, at 217/782- 4944. Permits may also be obtained online at: <http://www.agr.state.il.us/AnimalHW/animalregistry/login.php>

2. Must show results of required tests and/or vaccinations;
3. Must show name and address of owner or exhibitor;
4. Must be dated and signed by an accredited veterinarian;
5. Must show only one(1) identification per line on the CVI; and
6. Must show the official identification of each animal.
7. For out of state livestock, a CVI shall be void thirty (30) days, after issuance.
8. For Illinois origin livestock, a CVI shall be void ninety (90) days, after issuance.
9. If animals are from tuberculosis accredited, brucellosis certified, pseudorabies qualified, or brucellosis validated hers, the identifying herd number (s) along with the date of the last her test (s) shall appear on the CVI.

Note: No Corrections or Additions will be allowed on a Certificate of Veterinary Inspection.

Any Illinois cattle, bison, cervidae or goats being exhibited in non-accredited free states must be isolated from the remainder of the herd/flock upon return to Illinois and retested for tuberculosis 60-120 days post entry.

Animals with active lesions of ringworm with resulting loss of hair, soremouth, caseous lymphadenitis or multiple warts easily visible without close examination, will not be permitted to exhibit. Animals infested with scabies or mange will not be permitted to exhibit.

As a condition of entry in Illinois State Fair events, all exhibitors agree to cooperate fully with testing protocols including ultrasound. Department personnel may collect blood, tissue, milk or urine samples from any animal being exhibited and/or raced at any Illinois Fair to test for the presence of any substances, practices or other adulterants which may give the animal a competitive advantage. The Illinois Department of Agriculture may also collect blood, tissue or other test samples from exhibition animals at the time of slaughter.

Market animals (steers, barrows, wethers) at the Illinois State Fair must meet the requirements regarding drug withdrawal and eligibility for slaughter. If any therapeutic drugs are used just prior to the fair, they must have a withdrawal time such that they are slaughter eligible by the time they arrive at the fairgrounds.

Upon entry to the Illinois State Fairgrounds, no person shall administer internally or externally any medication or drug, including prescription and non-prescription, unless prior written authorization is received from the State Veterinarian's Office. Any medication or drug administered without written authorization or in an unauthorized dosage constitutes a violation of show rules, and all premiums and awards from all shows for the owner, exhibitor and/or trainer will be withheld.

All exhibitors of animals at any Illinois Fair shall comply with the provisions of the Illinois Humane Care for Animals Act. If violations are observed, the animal(s) will be excused from exhibition and be ordered removed from the grounds with all awards and premiums being forfeited.

Any practice or deviation from normal, accepted care, including physical or mechanical application, will constitute a violation of show rules and is subject to the above provisions.

CATTLE

Identification

1. Individual identification of each animal shall be either a fully healed and legible tattoo, approved official ear tag, registration number, or individual brand, if brand is recorded on the registration certificate.

Illinois Cattle

Brucellosis

1. Illinois is a Bovine Brucellosis Class-Free State. Brucellosis testing is not required for Illinois cattle.

Tuberculosis

1. Illinois is an Accredited Tuberculosis- Free State. Tuberculin test is not required for Illinois cattle.

Special Note: Illinois calves under 6 months of age and Illinois steers are not required to have a Certificate of Veterinary Inspection.

Out-of-State-Cattle

All out-of-state cattle are to be accompanied by an entry permit. Entry permit numbers are available by calling the Illinois Department of Agriculture, Monday through Friday from 8:00 AM to 4:30 PM, at 217/782-4944. Permits may also be obtained online at: <http://www.agr.state.il.us/AnimalHW/animalregriys/tlogin.ph>

Brucellosis

1. Female cattle six (6) months of age and older and bulls eighteen (18) months of age and older shall be negative to an official test for brucellosis within thirty (30) days prior to entry, unless exempt by one (1) of the following:
 - A. Originate directly from a certified brucellosis-free herd.
 - B. Official vaccinates of dairy breeds under twenty (20) months of age or official vaccinates of beef breeds under twenty-four (24) months of age.
 - C. Animal originated from a "Class Free" state (if entire state is so classified)
 - D. Steers and spayed heifers are not required to be tested for brucellosis.
2. The negative brucellosis test shall be conducted at a state or federal laboratory within 30 days prior to exhibition.

Tuberculosis

1. Accredited Tuberculosis Free States
 - A. No tuberculin test required. All cattle, including steers, originating from an Accredited Tuberculosis Free State, may enter Illinois for exhibition when accompanied by a CVI issued by an accredited veterinarian within 30 days.
2. Non-Accredited Tuberculosis Free Areas or States (Not TB Free)
 - A. Cattle must originate from a herd where a complete herd test was conducted within the past year.
 - B. The individual animals entering Illinois must be negative to an additional tuberculin test conducted within 30 days prior to exhibition.
 - C. Cattle that enter Illinois for exhibition and remain in Illinois (animal does not return to the state of origin within 30 days) must be isolated and retested for TB 60-120 days from the last official TB test date.

SWINE

Illinois Swine

Identification

1. Illinois swine shall be identified by an official ear tag, tattoo or recognized breed ear notch.
2. Ear notch identification is acceptable for barrows, crossbred gilts and breeding swine.

Special Note: Ear notch identification of crossbred swine does not satisfy USDA identification requirements for interstate movement or official testing.

Brucellosis

1. Brucellosis testing is not required for Illinois swine.

Pseudorabies

1. Pseudorabies testing is not required for Illinois swine.

Out-of-State Swine

All out-of-state swine are to be accompanied by an entry permit. Entry permit numbers are available by calling the Illinois Department of Agriculture, Monday through Friday from 8:00 AM to 4:30 PM, at 217/782-4944. Permits may also be obtained online at: <http://www.agr.state.il.us/AnimalHW/animalregistry/login.php>

Identification

1. Individually identified by an official ear tag, tattoo or recognized breed ear notch.
2. Ear notch identification is not acceptable for crossbred animals.

Brucellosis

1. Breeding swine 4 months of age and older shall be negative to an official test for brucellosis within 30 days prior to exhibition unless exempt by one (1) of the following:
 - A. Originate immediately and directly from a validated brucellosis-free herd.
 - B. Originate directly from a validated brucellosis-free state.
2. Swine brucellosis tests for exhibition shall be conducted at a state or federal lab.

Pseudorabies

1. Swine originating from a Pseudorabies Stage IV or V state are exempt from the pseudorabies testing requirement.
2. Swine originating from a Pseudorabies Stage III state shall be negative to an official test for pseudorabies conducted within thirty (30) days prior to entry or originate immediately and directly from a qualified pseudorabies negative herd.
3. Swine originating from a Pseudorabies Stage I or II state shall be negative to an official test for pseudorabies conducted within the 10 days prior to entry.
4. Barrows and females in market classes must meet the same requirements as breeding swine

SHEEP

Identification

1. Individual identification of each animal shall be by an ear tattoo or official metal or plastic tag or microchip if the owner provides the reader
2. Ear tattoos may be used when a registration certificate, listing the tattoo number, accompanies the animal.
3. When using ear tags, the tag must indicate the premises ID and state of origin. The tag number must be assigned by a state or APHIS representative and recorded in the Scrapie Record Database.

Market Lambs

All market lambs must be slick shorn (show ring ready) before weigh-in so that show lamb fungus can be identified.

Illinois Sheep

1. Sheep originating from a herd or flock that has previously been classified as either an infected or source herd or flock can be exhibited in Illinois upon the completion of an approved herd/flock plan.
2. For any animal born after 1/1/2002, the CVI must include the flock of birth and the flock of origin, if different.

Out-of-State Sheep

All out-of-state sheep are to be accompanied by an entry permit. Entry permit numbers are available by calling the Illinois Department of Agriculture, Monday through Friday from 8:00 AM to 4:30 PM, at 217/782-4944. Permits may also be obtained online at: <http://www.agr.state.il.us/AnimalHW/animalregriys/tlogin.php>

GOATS

Identification

1. Individual identification of each animal shall be by an ear tattoo or official metal or plastic tag or microchip if the owner provides the reader.
2. Tattoos may be used when a registration certificate, listing the tattoo number, accompanies the animal.
3. When using ear tags, the tag must indicate the premises ID and state of origin. The tag number must be assigned by a state or APHIS representative and recorded in the Scrapie Record Database. Ears should be used for tattooing when possible. If there is no space in the ear, the flank or tail fold may be used.

Illinois Goats

1. Goats originating from a herd or flock that has previously been classified as either an infected or source herd or flock can be exhibited in Illinois upon the completion of an approved herd/flock plan.
2. For any animal born after 1/1/2002, the CVI must include the flock of birth and the flock of origin, if different.

Out-of-State Goats

All out-of-state goats are to be accompanied by an entry permit. Entry permit numbers are available by calling the Illinois Department of Agriculture, Monday through Friday from 8:00 AM to 4:30 PM, at 217/782-4944. Permits may also be obtained online at: <http://www.agr.state.il.us/AnimalHW/animalregistry/tlogin.php>

1. Goats originating from a herd or flock that has previously been classified as either an infected or source herd or flock can be exhibited in Illinois upon the completion of an approved herd/flock plan.
2. Tuberculosis- Goats from areas or states that are not Accredited Bovine Tuberculosis Free, must be accompanied by a CVI indicating that the goats originated from a herd where a complete negative herd test has been conducted within the past twelve (12) months and the individual animals are negative to a tuberculin test conducted within thirty (30) days prior to entry. For any animal born after 1/1/2002, the CVI must include the flock of birth and the flock of origin, if different.

HORSES, PONIES, MULES AND OTHER EQUIDAE

Illinois Equine

1. All horses and other equidae, twelve (12) months of age and older attending an advertised equine event, shall be accompanied by a negative test for equine infectious anemia (EIA) conducted within the last twelve (12) months. A copy of this test shall accompany the animal.
2. AGID (Coggins) or ELISA tests are accepted.
3. An advertised equine event means a show, rodeo, sale, auction, exhibition, trail ride, or horse fair that is posted or media promoted.
4. A CVI is not required for Illinois equine

Out-of-State Equine

All out-of-state horses and other equidae are to be accompanied by an entry permit. Entry permit numbers are available by calling the Illinois Department of Agriculture, Monday through Friday from 8:00 AM to 4:30 PM, at 217/782-4944. Permits may also be obtained online at: <http://www.agr.state.il.us/AnimalHW/animalregistry/tlogin.php>

1. All horses and other equidae entering Illinois that are twelve (12) months of age or older, shall be accompanied by a negative test for equine infectious anemia (EIA) conducted within the last twelve (12) months. A copy of this test shall accompany the animal.
2. AGID (Coggins) or ELISA tests are accepted.
3. All horses and other equidae shall be accompanied by a CVI issued within thirty (30) days prior to entry.

General Requirements for all Poultry

POULTRY*

1. All entries (except waterfowl, i.e. domesticated fowl that normally swim, such as ducks and geese) in a show or exhibition shall have originated from a U.S. Pullorum-Typhoid Clean or equivalent hatchery or flock OR have a negative pullorum-typhoid test within 90 days prior to exhibition. Exhibitor shall show proper information as to name and address of owner or exhibitor, name and address of the authorized testing agent, date of the testing and the number, breed and species of those tested.

2. Prior to being used to transport poultry to a show, all crates, boxes, containers and vehicles shall be thoroughly cleaned and disinfected.
3. Any poultry vaccinations must be performed at least 4 weeks prior to delivery to the show.
4. Upon admission to a show, all entries shall be examined by an official fair veterinarian or qualified state personnel who shall also receive and examine all certificates necessary for admission of birds to a show. Birds not in show condition will be excused from exhibition and removed from the premises. Any fowl showing signs of illness during the fair will be removed from the exhibition grounds.
5. All out-of-state turkeys must originate from flocks that are officially classified as U.S. Mycoplasma Gallisepticum Clean in accordance with the provisions of the National Poultry Improvement Plan or be negative to a test for Mycoplasma gallisepticum within 30 days prior to entry.
6. A permit is also required for out-of-state poultry. A permit may be obtained by calling (217) 782-4944.

Special Note: These poultry exhibition requirements do not apply to 4-H / FFA 1-day poultry shows where entries are taken to the show and returned home the same day.

PIGEONS*

There are no requirements governing the movements of pigeons within or into Illinois.

*** Special Note regarding Exotic Newcastle Disease -** Illinois prohibits the importation of all members of the avian species or avian products that have originated from or been transported through any area where Exotic Newcastle Disease has been diagnosed and is under quarantine by any state, federal or tribal agency.

RABBITS

There are no requirements governing the movement of rabbits within or into Illinois.

LLAMAS

There are no requirements governing the movement of llamas within Illinois. A permit and health certificate is required for out-of-state llamas. Entry permit numbers are available by calling the Illinois Department of Agriculture, Monday through Friday from 8:00 AM to 4:30 PM, at 217/782-4944. Permits may also be obtained online at: <http://www.agr.state.il.us/AnimalHW/animalregistry/login.ph>

QAEC: must be taken online to show any animals at the Livestock or Small Pet show. You only have to take this one time in you 4-H career. If you have not taken it, you must before May 1, 2020.

<http://web.extension.illinois.edu/qaec>

YQAC: Must be taken or test out to determine your status for testing every year. There will be special test times set by the County 4-H Program Coordinator.

"The Department of Agriculture shall use its best efforts to secure sufficient appropriations to fund premiums. In any year for which the General Assembly of the State of Illinois fails to make an appropriation sufficient to pay such premiums, premium amounts may not be accurately reflected in this Premium Book."

The Animal Science, Animal Science Ready4Life and Animal Science Maker classes will be exhibited at the General Projects Show.

Animal Science for Beef, Dairy, Cat, Dog, Goat, Horse, Poultry, Rabbits, Sheep, Small Pets, Swine: (SF 50135)—This class is for 1st year members only.

Prepare a display focusing on any activity related to the beef project. Demonstrate the skills and knowledge you have gained through the animal project you studied. The exhibit may include, but isn't limited to, original works, objects, demonstrations, digital presentations, programs, websites, games, apps, performances, or posters which you have made. Choose whatever method best shows what you've learned. You must furnish any equipment you need for your exhibit. Internet service will not be provided for the exhibit. All exhibits must include something visual, such as a printed copy of a digital presentation, which will remain on display during the exhibition. Electronic equipment will only be used during your personal judging time and will not remain on display during the entire exhibit period. Live animals are not permitted as exhibits in this area. For safety reasons, exhibits cannot include glass, syringes with needles or any other sharp objects.

Animal Science Ready4Life Challenge: (SF 50137)

Open to 11- to 18-year-olds enrolled in Beef, Dairy, Cat, Dog, Goat, Horse, Poultry, Rabbits, Sheep, Small Pets, Swine any project.

Exhibits in this category must include the following: a) a physical representation of the career or business product such as a model, prototype or display/portfolio that includes images of accomplished work; b) verbal or written explanations that demonstrate knowledge of the related career or business fields, potential careers, and the appropriate requirements for achievement in those fields. The judging criteria for this class values thoroughness of career and/or business exploration and pursuit above the workmanship of the physical specimen on display.

Animal Science Maker (SF 50400)

For Beef, Dairy, Cat, Dog, Goat, Horse, Poultry, Rabbits, Sheep, Small Pets, Swine

Counties may submit 3 entries TOTAL combined from all Maker exhibit divisions.

Exhibits in this category are designed to be multi-disciplinary in nature, innovative, and must not fit into any other exhibit category. To qualify for this category, your project **MUST** abide by the following guidelines:

- Exhibits must be an object or device that has an intended purpose and uses technology in either a mechanical way, digital (computer) way, or combination of the two.
- The device must be something that can be used in everyday life by multiple people (a target audience), and **MUST** be manufactured/built by the exhibitor (If not fully manufactured by the exhibitor, the device **MUST** be modified structurally or be reprogramed to perform a different function other than what it was designed to do
- Exhibit **MUST** be able to interact with the outside world. (e.g. an on off switch, input sensors, feedback, etc.)
- Exhibits **MUST** include a detailed build log with instructions on how to make or build the exhibit, **AND** contain either a 3D rendering or detailed and labeled sketches of the device/product.
- All parts and software used in the design/build **MUST** be listed in a detailed Bill of Materials including cost per item and total cost. Total time spent on the build must be documented in your build log.

In addition, exhibitors are **HIGHLY** encouraged to use tools such as 3-D printers, laser cutters, routers and/or other hand/power tools to help in the manufacturing process (**NOTE: Simply 3-D printing or laser cutting an object without the other specifications does not qualify as a Maker Project**). It is also **HIGHLY** encouraged that exhibits use Open Source Software and/or Hardware in the build.

BEEF

Classes:

Cow—2 years and up—(Sr. Exhibitor)

Cow – 2 years and up—(Jr. Exhibitor)

Bull or steer calf ---under 6 months & still nursing cow-(Sr. Exhibitor)

Bull or steer calf ---under 6 months & still nursing cow-(Jr. Exhibitor)

Heifer 0-6 months—(Sr. Exhibitor)

Heifer 0-6 months---(Jr. Exhibitor)

Heifer 6-12 months—(Sr. Exhibitor)

Heifer 6-12 months—(Jr. Exhibitor)

Heifer 12-18 months—(Sr. Exhibitor)

Heifer 12-18 months—(Jr. Exhibitor)

Heifer 18-24 months—(Sr. Exhibitor)

Heifer 18-24 months—(Jr. Exhibitor)

Steers – will be divided into six (6) classes according to weight. Lightweight steers will show first and the heaviest will show last.

Rate of Gain Steers--Members may weigh two but can only have one entry. Steers must be weighed on the steer weigh date set by the Livestock committee and final weigh in at the fair.

Beef Showmanship, Senior

Beef Showmanship, Junior

Senior Exhibitors are 14 years of age and over. Junior Exhibitors are 13 years of age and under.

Animals shown in the senior exhibitor classes may not be shown in the junior exhibitor classes.

Champion and Reserve Beef Females will be selected. Champion, Reserve Champion and Third Place Steers will be selected. Steers will be automatically registered at weigh-in 6:30 p.m. Sunday night. **Beef move in is no later than 5:00pm Sunday, July 12.**

CAT

Cat---Sr. Exhibitors (Exhibitors 14 and over)

Cat---Jr. Exhibitors (Exhibitors 13 and under)

Your cat will be judged on:

1. Coat
2. Eyes
3. Ears
4. Body
5. Gums
6. Leg Structure
7. Temperament

There will be Grand Champion & Reserve Champion picked from the two classes.

Cats must be exhibited on a lease.

Be prepared to answer questions about your pet's health record. Vaccinations must be within one year of the show. Posters exhibit in Animal Science project at General Show, 1st year members only.

DAIRY CATTLE

Heifer: under one year

Heifer: 12-24 months

Cow: 2 years and up

Dairy Showmanship: Showmanship class will only be held if there are two or more exhibitors in the class.

Champion and Reserve Dairy will be selected. **Animals must be on the Fairgrounds by 5:00pm, Sunday, July 12.**

DOG

Dog Care—Senior Exhibitor (14 years of age and over)
Dog Care—Junior Exhibitor (13 years of age and under)

Your dog will be judged on:

1. Coat
2. Weight
3. Eyes
4. Mouth
5. Ears
6. Feet

There will be a Grand Champion & Reserve Champion Dog Care.

Dog Obedience—All ages of Exhibitors

This class will be judged by the following criteria:

Beginnner

1. Heel on leash;
2. Figure 8 on leash;
3. Stand for Examination on leash;
4. Recall on leash;
5. Long Sit or down on leash (handler chooses) for 1 minute;

Novice

1. Figure 8 on leash
2. Stand for Examination on leash
3. Heel off leash
4. Recall off leash
5. Long Sit or down off leash (handler chooses) 2 minutes

Advanced

1. Heel on leash
2. Stand for examination off leash
3. Heel and figure 8 off leash
4. Drop on recall
5. Long sit or down handler out of sight 3 minutes(handler chooses)

There will be a Grand Champion & Reserve Champion Dog Obedience.

All dogs must be exhibited on a leash. Be prepared to answer questions about your pet's health record. Dogs must be vaccinated within one year of the show. Posters exhibit in Animal Science project at General Show, 1st year members only.

GOATS

Dairy Goat Classes

- Dairy Buck—born on or after 02/01**
Dairy Doe—under 6 months
Dairy Doe—6-12 months
Dairy Doe Yearling—1-2 years of age
Dairy Doe—2 years & up

Meat Goat Classes

- Meat Buck—born on or after 02/01**
Meat Doe—Under 6 months
Meat Doe—6-12 months
Meat Doe Yearling—1-2 years of age

Meat Doe—2-3 years of age
Meat Doe—3 years of age & up

Pygmy Goat Classes (county only project)

Pygmy Buck—born on or after 02/01
Pygmy doe—under 6 months
Pygmy doe—6-12 months
Pygmy doe—over 1 year

Meat Wethers:

Light weight market wether
Medium weight market wether
Heavy weight market wether

Dairy Wethers

Any weight Dairy market wether

Rate of Gain Wethers (Meat and Dairy)—Members may weigh two but can only show one entry. Wethers must be weighed on the wether weigh date set by the Livestock committee and final weigh in at the fair.

Showmanship

Senior—ages 14-18 years of age
Intermediate—11-13 years of age
Junior—8-10 years of age

Champion and Reserve Champion doe will be selected in Dairy, Meat and Pygmy Goats. Champion, Reserve Champion and 3rd place wether overall will be awarded. Animals must be on the Fairgrounds by 5:00pm, Sunday, July 12. Weigh in for goats will be Sunday, July 12 at 6:30 pm.

HORSE Policies and Procedures

Exhibitors must submit a negative Coggins test for each horse to the superintendent upon check-in. Helmets are required at ALL TIMES while mounted!

1. No stallions will be allowed to show in any class.
2. All animals must be on halter when not under saddle.
3. **Horses must be on the grounds thirty minutes before the show starts.** 4-H members and their horse (s) must remain on show grounds until the Horse Show is over. Except Heavy Horses which may leave at noon.
4. Numbers must be visible.

5. Attire: It is mandatory to wear appropriate western or English attire, including long pants, a shirt with long or short sleeves and a collar, (no t-shirts or tank tops), western hat (for halter classes only) and cowboy boots. Spurs, chaps, gloves, and ties are optional. T-shirts will be allowed in classes 18-22. Helmets must be worn in all classes but halter.
6. Exhibitors will be disqualified for hitting or whipping in front of saddle, or other inappropriate behavior such as foul language or abuse of animal.
7. Ties will be run or worked (trail) off. No coin tosses.
8. Tie downs, bell boots, splint boots, illegal bits and leg wraps are prohibited in classes 12-15 and if used in classes 10 & 11, you could incur a penalty at judge's discretion.
9. Animals shown in the Senior Exhibitor classes may not be shown in the Junior Exhibitor classes.
10. All exhibitors must provide proof of ownership/or lease agreement papers to the Extension office by June 1 of current year. There is no limit on number of horses enrolled.
11. No animal may be shown by more than one exhibitor.
12. Exhibitors showing more than one horse should designate on the pre-registration form which horse is to be shown in each class.
13. The judge may not be approached at any time by exhibitors, parents/guardians etc. before, during or after the show.
14. Horses must be removed from the Fairgrounds by midnight of show day (Sunday).
15. Helmets must be worn any time the youth is mounted.
16. Sr. Exhibitors are 14 years of age and over by September 1 of 2019, Jr. Exhibitors are 13 years of age and under by September 1, 2019.

HORSE

Draft Horse Class

1. **Draft Halter**

Mule Class

2. **Mules and Jacks (under one year) and Jennets (any age)**

Halter Classes:

Animals will be judged on conformation, type, soundness, and way of moving, fitness, general balance and appearance.

3. **Pony Halter – mare or gelding, 2 years old and older, 56" and under.**
4. **Horse Halter Mare, 2 years old and older – Senior Exhibitor**
5. **Horse Halter Mare, 2 years old and older – Junior Exhibitor**
6. **Horse Halter Gelding, 2 years old and older--Senior Exhibitor**

7. Horse Halter Gelding, 2 years old and older—Junior Exhibitor

Showmanship: Judged on the exhibitor's ability to fit and show a halter horse. The exhibitor will perform pattern work. Points awarded on the following criteria: Appearance of animal- 40%; appearance of exhibitor- 10%; showing of animal- 50%

8. Showmanship, Senior Exhibitor

9. Showmanship, Junior Exhibitor

Performance Classes – Each horse may show only one time in any one class. In all timed events, the exhibitor must complete the pattern to receive a time.

Trail: Judged on the horse and rider's ability to navigate obstacles that they may encounter on a trail.

10. Trail Class– Senior Exhibitor (a tie-down could incur a penalty).

11. Trail Class– Junior Exhibitor (a tie-down could incur a penalty).

Walk- Trot: Designed for beginner riders, exhibitors will be required to walk, trot, and back their horse. Those showing in this class will not be eligible to show in any class requiring a canter or lope. Western or English style will be permitted.

12. Jr. Walk/Trot

13. Sr. Walk/Trot

Open Pleasure: Exhibitors will be required to walk, jog, lope, and back.

14. Open Pleasure– Senior Exhibitor – no gaited horses

15. Open Pleasure – Junior Exhibitor – no gaited horses

Horsemanship: Judged on the combined performance of the horse and rider. Pattern work will be performed

16. Horsemanship—Senior Exhibitor

17. Horsemanship---Junior Exhibitor

Fun classes: Timed event, knocking over a pole or barrel carries a 5-second penalty.

18. Egg and Spoon – no draft horses

19. Pole Bending-knock over 5 poles, no time

20. Catalog Race-forget to close catalog, no time

21. Barrel Race-knock over 3 barrels, no time

22. Ribbon Race-lose ribbon, no time

POULTRY

Eggs—1 dozen in carton--Sr. Exhibitors (no premium county only)

Eggs—1 dozen in carton--Jr. Exhibitors (no premium county only)

Bantam Chickens—pair of 2—Sr. Exhibitors

Bantam Chickens—pair of 2—Jr. Exhibitors

Chickens—pair of two—Sr. Exhibitors

Chickens—pair of two—Jr. Exhibitors

Ducks—pair of two—Sr. Exhibitor

Ducks—pair of two—Jr. Exhibitor

All other fowl—pair of two

Fryer pen of three (3)—market ready

Embryology—pair of 2 recent hatchlings—with a one page report that includes

- Incubation date
- Date chicks began hatching

- Date hatching was completed

Showmanship-- Sr. Exhibitors 14 year of age & over
Showmanship—Jr. Exhibitors 13 years of age & under

Animals shown in the senior classes may not be shown in the junior classes.
 A pair of two must be of the same species and breed one (1) male and one (1) female.
 Champion & Reserve of each class will be selected along with Grand Champion & Reserve Grand Champion over all Chickens

RABBITS

Doe Rabbit under 6 months—Sr. Exhibitor
Doe Rabbit under 6 months—Jr. Exhibitor
Breeding age doe over 6 months—Sr. Exhibitor
Breeding age doe over 6 months—Jr. Exhibitor
Buck under 6 months—Sr. Exhibitor
Buck under 6 months—Jr. Exhibitor
Buck over 6 months—Sr. Exhibitor
Buck over 6 months—Jr. Exhibitor
Meat Pen of Three—Market Ready--Sr. Exhibitor
Meat Pen of Three—Market Ready--Jr. Exhibitor

Showmanship---Sr. Exhibitors 14 years of age & over
Showmanship---Jr. Exhibitors 13 years of age & under

Animals shown in the senior classes may not be shown in the junior classes. Champion& Reserve Champion Doe will be selected along with Champion & Reserve Champion Buck. Showmanship winners will receive a prize.

SMALL PETS

Cage Birds: Exhibit one bird you have cared for. Must be confined.
Cavies (Guinea Pigs): Exhibit one cavy (Guinea Pig) you have cared for. Must be confined.
Aquatic Science: Exhibit one pair of fish in a small bowl with plastic cover. No decorative item in bowl.
Other: Check with the Extension office about exhibiting other small pets.

There will be a Grand and Reserve Champion overall picked.

SHEEP

Ram lamb--6 months & under
Ewe Lamb—under 1 year of age
Ewe – one year & over
Wether Lamb –finished and cleanly shorn over their entire bodies

Rate of Gain--- Members may weigh two but can only show one entry. Wethers must be weighed on the wether weigh date set by the Livestock committee and final weigh in at the fair.

Sheep Showmanship, Senior Exhibitors 14 years of age & over
Sheep Showmanship, Junior Exhibitors 13 years of age & under

Champion and Reserve Ewe and Champion and Reserve Wether Lamb will be selected.

Animals must be on the Fairgrounds by 5:00pm, Sunday, July 12. Wethers will be weighed at 6:30pm on Sunday, July 12. Minimum weight to sell in the auction is 90 pounds.

SWINE

Gilts (Purebred or Mixed)-- There will be six classes of market gilts divided by weight. Divisions will be determined by the Superintendents.

Barrows-- All breeds will be divided into twelve classes according to weight. Divisions will be determined by the Superintendents.

Rate of Gain--- (Barrows only) Members may weigh two but can only show one entry. Market barrows must be weighed on the wether weigh date set by the Livestock committee and final weigh in at the fair.

Showmanship – Sr. Division – ages 14-18
Intermediate Division - ages 11-13
Jr. Division - ages 8-10

Champion, Reserve Champion and Third Place Barrows will be selected. Champion and Reserve Champion Gilt will be selected.

Swine move in is **Midnight Friday, July 10**. Weigh in will be 6:00 am on Saturday, July 11.

Note: All swine exhibitors MUST be present to assist at weigh-in, or have a representative present if you are unable to attend.

Rules:

1. Swine may not be shaved for the county show per the request of swine buyers.
2. Shavings & straw will not be allowed in the Swine barn. Rubber mats or carpet will be allowed as bedding.
3. At the Swine Show all animals will be staged prior to the class they will be showing in. These holding pens will be used for all classes.
4. Swine will be tagged at weigh-in.
5. Ideal showing weight is 230 to 260 lbs.
6. Minimum weight to sell in the auction is 210 pounds.
7. May only show 5 barrows and/or 4 gilts.

