

# 2020 Morgan County 4-H Exhibit Showbook



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COLLEGE OF AGRICULTURAL, CONSUMER  
& ENVIRONMENTAL SCIENCE

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**University of Illinois Extension**  
**CODE OF CONDUCT FOR 4-H EVENTS & ACTIVITIES**

ALL participants in events and/or activities planned, conducted, and supervised by the University of Illinois Extension and 4-H, are responsible for their conduct to U of I Extension personnel and/or volunteers supervising the events. This responsibility is necessary for the health, safety, and welfare of the participants, will be rigidly adhered to, and will be uniformly enforced. The following conduct is not allowed while participating in any 4-H event or activity and is subject to disciplinary action:

**Category 1**

- a) Possession, use, or distribution of alcohol and other drugs\*, including tobacco products.
- b) Theft or destruction of public or private property.
- c) Involvement in sexual misconduct or harassment.
- d) Possession or use of dangerous weapons or materials (including fireworks).
- e) Fighting or other acts of violence that endanger the safety of the participant or others.

**Category 2**

- a) Intentionally interfering with or disrupting the event.
- b) Use of profane or abusive language.
- c) Disregard for public or personal property.
- d) Public displays of affection or inappropriate actions.
- e) Failure to comply with direction of Extension personnel, including designated adults acting within their duties and guidelines.

**\* Prescription drugs must be listed on an Emergency Medical Information form.**

**Consequences:**

The University of Illinois Extension reserves the right to restrict participation in future activities for those individuals who have been removed from an activity for any behavior outlined in Category 1 or Category 2. In all cases, the participant will be responsible for restitution of any damages incurred by his/her actions.

**Category 1:**

1. When notified of any of the actions listed under Category 1, the adult in charge will ascertain the relevant facts and, with concurrence from the U of I Extension staff, will notify the affected participant of the action and any supporting evidence. The participant will be allowed an opportunity to answer the allegations and, if necessary, law enforcement officials will be notified. While facts are being verified, the participant will be removed from the 4-H activity/event and be under direct supervision of an adult chaperone.
2. The parent or guardian will be notified of the behavior and must make arrangements for removal of the participant from the activity, at the parent's or guardian's expense.
3. Documentation must be completed on an "Incident Report Form."

**Category 2:**

1. When notified of any of the actions listed under Category 2, the adult in charge will ascertain the relevant facts and, with concurrence from the U of I Extension staff, will notify the participant of the action and any supporting evidence. The participant will be allowed an opportunity to answer the allegations and, if necessary, law enforcement officials will be notified. While facts are being verified, the participant will be removed from the 4-H activity/event and be under direct supervision of an adult chaperone.
2. The parent or guardian of the participants who are in violation of Category rules, will be notified of the actions by the participant. The parent or guardian must immediately remove the participant from the activity, at the parent's or guardian's expense. Participants who exhibit conduct as described in Category 2, letters d-j, will receive a verbal and written warning (initialed by the adult and the participant). Upon receiving a second warning, the parent or guardian will be notified of the behavior and must make arrangements for removal of the participant from the activity, at the parent's or guardian's expense. "We understand and accept the responsibility for following the "Code of Conduct" for this 4-H event or activity. We further understand that failure to do so will result in disciplinary action.

## 4-H GENERAL RULES

### Program Fee

- **Who needs to pay a 4-H program fee?** Members that are part of a sustained 4-H experience including delivery modes such as community clubs, SPIN clubs, and/or special interest groups meeting on a regular basis, Cloverbud members, independent members, and after-school programs that meet regularly.
- **Late Fee** A late fee was implemented in the 2011-2012 4-H program year. Current 4-H members failing to meet the second Friday in December re-enrollment deadline will be assessed at late fee of \$30.00 above the \$20.00 program fee. The late fee cannot be paid by the club. Members have until February 1 of the current 4-H year to pay the late fee. Failure to do so will result in ineligibility to take part in 4-H exhibitions, receive 4-H premiums, receive other awards or recognition, and sell in the 4-H Livestock Auction. **There is a \$60 family cap.**
- **What will these fees be used for?** Fees will be used for program support and to maintain the existing 4-H program.
- **When are fees due?** Fees for re-enrolling members and **new members** enrolling by the second Friday in December will be due February 1. Club leaders will be sent a list of members currently listed in the 4-HDMS data base the first regularly scheduled working day after January 1. Club leaders will collect their member fee's and then submit **ONE** club account check to the Extension office along with the club's member enrollment form. Checks should be made payable to U of I Extension. Indications will be made on the club member sheet if an individual's fee has already been paid.
- **When are fees due for members who join after the second Friday in December?** Fees for new members enrolling after the second Friday in December must accompany their enrollment, whether it is paid to the club leader or directly to the Extension office. New members will not receive the "Clover" newsletter until enrollment sheet and payment are received into the Extension office. Checks should be made payable to U of I Extension.
- **Program Fee Waivers available?** This will depend on outside donations from various sources. Those members needing the fee waived may contact their club leader or Extension office.
- **Project Enrollment Deadlines** – All members must be enrolled as a member of a 4-H club. All re-enrolling 4-H members must have their project selections made by the **second Friday in December, 4:30 p.m. (NO EXCEPTIONS)** of the current 4-H year. Projects may be added or dropped till May 1.
- **When will manuals be ordered?** Manuals for ALL members will be ordered after the December deadline and May 1 deadline.

### Attendance Policies

1. Previously enrolled 4-H members must attend 50% of their club's scheduled meetings each year to be eligible to take part in 4-H exhibitions, receive 4-H premiums, receive other awards and recognition, and sell in the 4-H Livestock Auction. New 4-H members must attend 50% of club's meeting after joining, to be eligible to take part in 4-H exhibitions, receive 4-H premiums, receive other awards and recognition, and sell in the 4-H Livestock Auction.
2. 4-H members who are unable to attend a 4-H meeting for events such as school activities, illness, or circumstances beyond their control and wish to be excused must let their 4-H leader know in advance where applicable.

### Exhibit Information

#### Exhibit registration is done through 4HOnline.

1. A member may receive 4-H premium money in only one unit. Membership is credited to the unit authorizing, supporting, and receiving 4-H program fee money even though some members may live outside the county. A record of enrollment must be in the Extension office by May 1 of the current 4-H year and enrollment fee paid in order to exhibit at a 4-H exhibit show.
2. No entry fee is required for 4-H exhibits.
3. 4-H premiums will be distributed using an A, B, or C rating. Premiums will be designated by a formula system based on the number of exhibits and the total money available from state funds. This will not be determined until after all classes have been exhibited and money from state legislation has been determined.
4. 4-H members may exhibit only in the projects in which they are presently enrolled. All exhibits must have been part of the member's work during the current year.

#### Exhibits Ratings will be rated as follows:

- "A" = Project meets or exceeds the given requirements.
- "B" = Project does not meet requirements or needs minor improvement.
- "C" = Project does not meet requirements or needs major improvement.
- State Fair Delegate = Project is selected to represent the county at the state level.
- State Fair Delegate Alternate = Project is selected to advance to state if delegate choose not to exhibit.

5. **Project Requirements** – Recommendations in the project books and the specific project exhibit requirements will be used in judging the exhibit. Judges are provided a copy of the exhibit requirements prior to judging.
6. **All non-livestock** exhibits must have an exhibit tag and all articles of the exhibit should be tagged with the exhibitor’s information. Exhibits without tags will not be judged. It is the exhibitor’s responsibility to ensure the tags are firmly attached by tying or stapling the tag to the project. Due to the heat and humidity, tape is not a recommended way of attaching your exhibit tag and should only be used as a last resort.
7. **Pre-printed entry tags** will be passed out during project check-in or may be picked up at the Extension Office prior to the exhibit day. The tags should be tied or stapled to exhibits.
8. **Dog Show** – Morgan County 4-H Dog Show – approximately a week before the fair in the Merchants Building on the Morgan County Fairgrounds.
9. Project check-in times will be listed in the Morgan Fairbooks and the 4-H Clover newsletter. Exhibitors are asked to allow superintendents place projects in the exhibit area.
10. Any 4-H member meeting the eligibility rules for participation set by the Jr. Department of the Illinois State Fair and have received an “A” rating can be chosen to represent 4-H if they have reached their 10 birthday by Sept. 1 of the current 4-H year. Projects defined as “County Only” projects are ineligible for selection to the IL State Fair.
11. If a 4-H member needs a reasonable accommodation to participate in the 4-H Shows, please contact the local Extension office.
12. University of Illinois Extension is not responsible for loss or damage to any articles/animals exhibited at any 4-H exhibit show.

**Premiums**

**“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 accurately reflected in this Premium Book.”**

Premiums are based on an x factor. The 2019 x factor was .72 Subject to change.

A	B	C	Beef, Dairy, Dogs, Goats, Horses, Poultry, Rabbits, Sheep, Swine
10	9	8	
7.20	6.48	5.76	
A	B	C	General Projects
7	6	5	
5.04	4.32	3.60	

## LIVESTOCK EXHIBIT INFORMATION

1. **Animal Leasing** – A 4-H member involved in any dog, horse project has the option of leasing an animal for the duration of the project. The animal may be shown at the county 4-H show, provided that a copy of the signed lease agreement and a photo of each side of the animal are on file at the Extension Office by May 1 of the 4-H year. Forms are available at the Extension Office.
2. All exhibits must have been made and/or personally cared for during the 4-H year. Livestock must be a part of the member's project during the required ownership period.
3. No one will be allowed in the judging area except 4-H members, judges and workers.
4. All livestock and poultry shall comply with the Illinois Livestock Exhibition Regulations, which are printed in the County Fairbook.
5. All animals must be shown by the owner, except in the case of illness, if the 4-H member enters the Armed Forces, is attending a State 4-H event, or when a conflict exists when two different projects are shown at the same time. In such cases, another 4-H member enrolled in a livestock project may show the animals.
6. Extension staff and Fairboard will interpret the rules and answer all questions that may arise.
7. The judges' decisions shall be final unless a written protest is turned into the Department Superintendent before the end of the show. Protests must be turned into the Extension Office within one day of the show. A protest committee made up of the Department Superintendents, Auction Superintendent, and Extension staff will handle all protests.
8. **Youth for the Quality Care of Animals (YQCA)**. YQCA is a new livestock quality assurance program that is replacing PQA which no longer exists. All 4-H exhibitors of these animals, **dairy cattle, beef cattle, swine, sheep, and goats**, will be required to certify in the YQCA program each year starting for the 2020 show season. Attend either a face to face class or certify on-line via the website <http://yqca.org>. The YQCA program is for youth ages 8-21. The online version is broken into age divisions as follows: juniors 8-11, intermediate 12-14, senior 15-18, and young adults 19-21. This certification is needed each year with test out options of 1-3 years. Youth exhibiting swine at the Illinois State Fair and 4-H fairs are no longer required to be PQA plus certified. The estimated cost for the face-to-face training will be \$3 and \$12 for the online version. **Certification for YQCA must be completed by June 1.**
9. **Quality Assurance and Ethics Certification (QAEC)**-4-H Youth enrolled in a dog, cat, horse, rabbit, and poultry, are required to complete this online course one time in order to stay enrolled in the project area. Once you complete this program, you will earn your certificate of completion for the Quality Assurance and Ethics Certification. **Certification for QAEC must be completed by June 1.**
10. Unsportsmanlike conduct will not be tolerated. Such conduct by an exhibitor may be grounds for disqualification by the superintendents. Members, leaders, or parents showing unsportsmanlike conduct may be asked to leave the show area.

### Livestock Birth and Ownership Deadlines:

**Health regulations for exhibiting livestock at a county fair can be found here:**

<https://4h.extension.illinois.edu/programs/animal-sciences/livestock-issues>

### **STEERS & MARKET HEIFERS (MARKET HEIFERS NO LONGER A STATE FAIR CLASS):**

- Calved on or after January 1, 2019
- Owned & personally cared for by exhibitor since – February 1, 2020
- Weighed, Tattooed & Tagged –
  - **On or between the last Saturday in January (January 25, 2020) and February 29, 2020.**
  - In addition to tattooing, steers that will be going to state fair are to be tagged with the electronic ID tags. Information forthcoming from Dan Jennings regarding obtaining the tags. Each tag should be recorded to the nomination sheet. All paperwork should be sent to Dan Jennings.

### **BARROWS: Regular Barrows**

- **Farrowed on or after January 1, 2020** and must be the property of the exhibitor by June 1, 2020.
- No weighing and tattooing required but must submit ear notches when making entry for ISF

### **BARROWS: Premiere Barrows**

- **Farrowed on or after February 10, 2020** and must have been the property of the exhibitor by June 1, 2020
- Weighed and Tattooed with Box A tattoo from February 10 to April 15, 2020
- Tattooed within 35 days of birth and not weigh more than 1.0 lbs/day of age
- Junior exhibitors can purchase pre-nominated barrows

### **SHEEP Market Wethers & Market Ewe Lambs: Live Show Wethers – No more Regional check-in sites – New nomination format**

- **Lambled on or after January 1, 2020**
- Ownership Date – May 15, 2020
- Self-nomination as follows: Nominations must be signed by local Extension Office.
- Exhibitors fill out and send in nomination form with photo of lamb's ear with scrapie tag installed in ear (close up photo of ear so scrapie tag can be read). This must be completed between March 15 and May 15, 2020. Send to Dan Jennings, Region 1 Office, 1100 E., Warrenville Rd., Suite 170, Naperville, IL 60563.

### **Jr. and Open Premiere Wether & Ewe lambs: - Weigh-in, tattoo, and nomination procedures:**

- Junior and open premiere lambs will be nominated, tattooed, and weighed at the county level.
- Premiere lambs must be weighed and tattooed with the Box A tattoo followed by a number starting with 1 - This must be witnessed by a local Extension employee or a person they designate, such as a volunteer or local sheep superintendent.
- Completed nomination forms must be signed by the local Extension Office.
- Send nomination forms to Dan Jennings (address above).
- Ownership and nomination deadline is March 15 to May 15, 2019.
- Lambled on or after January 1, 2020

### **MEAT GOAT WETHERS: Live Show Wethers – No more Regional check-in sites – New nomination format**

- **Wethers – Born on or after October 1, 2019**
- Ownership dates for Kids & Yearlings not in milk – May 15, 2020
- Self-nomination as follows: Nominations must be signed by local Extension office.
- Exhibitors fill out and send in nomination form with photo of goat's ear with scrapie tag installed in ear (close up photo of ear so scrapie tag can be read). This must be completed between March 15 and May 15, 2020. Send to Dan Jennings, Region 1 Office, 1100 E. Warrenville Rd., Suite 170, Naperville IL 60563

### **BEEF – HEIFERS AND COWS:**

#### **Heifers**

- Age requirement is from September 1, 2018 to March 31, 2020 (*w/ addition of Senior Yearling class*)
- Owned and personally cared for by exhibitor since June 1, 2020

#### **Performance Cows**

- Cows must be born before September 1, 2018 (*Cow-Calf Class only*)
- Owned and personally cared for by exhibitor since January 1, 2020

### **SWINE – GILTS:**

- Age requirement is farrowed on or after January 1, 2020
- Owned by exhibitor since June 1, 2020

### **SHEEP – EWES & RAMS:**

- Age requirement for yearling ewes is from January 1, 2019 to August 31, 2019
- Age requirement for ewe lambs is after September 1, 2019
- Age requirement for ram lambs is after January 1, 2020
- Owned and personally cared for by exhibitor since June 25, 2020

### **DAIRY – COWS AND HEIFERS:**

- No age requirements
- Calves and Heifers – Owned since June 1, 2020
- Cows – Owned since January 1, 2020

**HORSE AND PONY:**

- On or before June 1 – Copies of the ownership and/or lease papers, State Fair Entries, and one set of photos sent to Donna Miller at: Illinois State Fair Entry Department, P.O. Box 19427, Springfield IL, 62794-9427.

**DOGS:**

- Dogs must be owned or leased by June 1, 2020
- At this time, no paperwork is required to be on file. Make entries via 4-H online.

**DAIRY GOATS:**

- Kids and Yearlings not in milk must be owned by exhibitor only by June 1, 2020.
- Milking Does must be owned by exhibitor only by January 1, 2020.

**MEAT GOATS**

- All meat goats (wethers and all breeding animals) are to be owned by exhibitor only by May 15, 2020.

**RABBITS, PYGMY GOATS & POULTRY:**

- Animals in these species that are to be exhibited at the ISF Jr. Show must be owned by the exhibitor as indicated: Does -- By June 1 of the year exhibiting; All others -- Out of stock owned by the exhibitor prior to June 1.



**4-H LIVESTOCK AUCTION  
RULES ARE SUBJECT TO CHANGE**

1. The Morgan County 4-H Auction is only for Morgan County 4-H members who have exhibited a market animal during the current year's fair.
  2. 4-H members selling livestock are to be present at the time of the sale.
  3. The Auction Committee and Extension staff will interpret the rules and answer all questions that may arise.
  4. All Department Superintendents are to have their AUCTION LISTS available no later than NOON on Sunday of the Fair. Names turned in after NOON on the Sunday during the fair may not be listed in the sale flyer.
  5. 4-H members are responsible for contacting the Department Superintendent with the animal to be sold.
  6. A 5% commission will be deducted from the net of each auction animal sold to support Morgan County 4-H Programs.
  7. Each 4-H member may enter only one of the following projects to sell: steer, barrow, meat goat or sheep wether, poultry (meat pen), geese (one goose or one gander) duck (one drake or one hen), turkey (one tom or one hen), rabbits (one meat pen of three.) NOT MORE THAN ONE SPECIES OF LIVESTOCK MAY BE SOLD BY EACH EXHIBITOR.
  8. Sale order will be determined by placing where possible. The superintendents have full responsibility for setting the sale order.
  9. No sale agreements will be in effect. The member may reject the final bid, provided it is done before the animal leaves the ring.
  10. Animals become the property of the buyer upon leaving the sale ring, unless the buyer returns ownership to the 4-H member according to auction procedures.
  11. All swine and sheep that sell will be paint branded at weigh-in time. All steers will be permanently identified at weigh-in. In the event an unmarked animal is selected Grand or Reserve Grand Champion, that animal may be nominated for sale, but must be stated so, to the Department Superintendent before it leaves the Show Ring.
  12. NO AUCTION ANIMAL MAY LEAVE THE FAIRGROUNDS UNTIL AFTER THE SALE. ANIMALS THAT LEAVE THE GROUNDS PRIOR TO THE SALE WILL BE BARRED FROM THE SALE. NO EXCEPTIONS!!!!!! THIS RULE WILL BE ENFORCED IN ALL CASES, NO MATTER IF THE ANIMAL IS GRAND CHAMPION OR LAST IN THE CLASS.
  13. All 4-H members who are selling in the auction will be expected to help clean the barn and show areas after the sale.
  14. The auction will be conducted under the following guidelines:
    - a. The auction committee will establish an average local market price for every species, which will be posted the morning of the auction.
    - b. The BUYER will have two options:
      - i. The buyer may elect to keep the animal and pay the seller for the full bid price.
- OR
- ii. The buyer may elect to return the animal to the seller and pay only the difference between the bid price and the local market price. The seller retains ownership of the animal.
15. This is the buyer's decision. The buyer must decide before the animal leaves the ring. The buyer's decision is final.
  16. There will be no weight limitations on any species.
  17. 4-H members should be prepared to haul animals home after the auction, in the event the buyer decides to return ownership to the seller.

**Master Showmanship Contest**

The Master Showmanship Contest is open to Morgan County 4-H members age 14 and over exhibiting at the Morgan County Fair. There is no limit on the amount of times that you may win this event and you may still participate the next year(s). The Master Showmanship Contest will be held in the Livestock Show Ring on the Morgan County Fairgrounds. Participants are responsible for acquiring a wether/ewe, a barrow/gilt, and a steer/heifer to use during the contest. Participants will be judged on their knowledge of and ability to show sheep, swine, and cattle.

## 4-H SHOWMANSHIP

1. Limited to Morgan County 4-H members only.
2. Showmanship may be divided into junior and senior divisions when deemed necessary by the department superintendent. However, only one award will be available in each department: Beef, Sheep, Swine, Horses and Goats.
3. Age will be determined as of September 1 of the current enrollment year.  
Junior: 13 and under      Senior 14 and up
4. Showmanship classes will be held after the conclusion of the respective livestock specie shows.
5. Participants must show their own project, unless directed otherwise by the judge.
6. Animals are to be groomed by the showman.
7. The judge has the final decision. He or she may choose to ask the exhibitors to identify parts of the animal's body or explain a particular concept of livestock management.

## 4-H BEEF PREMIERE

1. Restricted to Morgan County 4-H members only.
2. Steers only may enter this class.
3. Steers must have been weighed and tattooed and an electronic ear tag placed by the established date to be eligible.
4. Each individual may nominate a total of five (10) steers. However, only one may be entered in the contest at weigh-in time.
5. Animals must be in place at the same time as other cattle, according to the fair catalog.
6. Steers must be properly groomed and halter broke.
7. All steers must be sound and must follow the health requirements as listed in the fair catalog.
8. Animals will be placed according to pounds of daily gain.
9. Premiums will be given to the top eight (8) steers:  
1<sup>st</sup> .....\$75  
2<sup>nd</sup> & 3<sup>rd</sup> .....\$50  
4<sup>th</sup>-8<sup>th</sup> .....\$25

## SWINE PREMIERE

1. Restricted to Morgan County 4-H members.
2. Barrows only may be entered in this class.
3. Pigs must be weighed, tattooed, castrated and earnotched BEFORE they are 35 days of age and cannot weigh more than 1.0 pounds per day of age. Pigs must be castrated prior to nomination. All pigs must be tattooed before April 15.
4. Individuals may nominate up to (5) barrows. Only one may be entered at weigh-in time.
5. Pigs must have been farrowed after January 15 of the current year.
6. Animals must follow the health rules listed in the fair catalog.
7. All barrows must be sound without physical evidence of abscess. The superintendents may disqualify such animals.
8. All animals will be placed according to pounds of daily gain.
9. Premiums will be given to the top three barrows:  
1<sup>st</sup> .....\$75  
2<sup>nd</sup> & 3<sup>rd</sup> .....\$50  
4<sup>th</sup>-6<sup>th</sup> .....\$25

**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.

**Animal Science: (Open to members in Beef, Cats, Dairy, Dogs, Goats, Horse & Pony, Poultry, Rabbits, Sheep, Small Pets, and Swine)** (SF 50135)

Prepare a display focusing on any activity related to the animal 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, Cats, Dairy, Dogs, Goats, Horse & Pony, Poultry, Rabbits, Sheep, Small Pets, and Swine)**

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.

**BEEF – Classes are subject to change. Complete list of classes are available when registering for exhibit.**

1. **Youth for the Quality Care of Animals (YQCA) certification is required-** All 4-H exhibitors of these animals: **dairy cattle, beef cattle, swine, sheep, and goats**, will be required to certify in the YQCA program each year starting for the 2020 show season.
2. All heifers WITHOUT registration papers will be shown by weight in the Non-registered All Other Breeds class.
3. All bulls should be shown with nose rings.
4. Each steer entered must have been born after January 1 of the previous year.
5. Protests on breeds will be blood tested at the protestor's expense (\$50 or current rate if higher) until protest is settled.
6. The Morgan County Fairbook will list exhibit times.

**Breeds: Angus, Hereford, Shorthorn, Simmental, All Others**

**Beef 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.

**BICYCLE** (not eligible for state fair)

**Bicycle 1**

Exhibit a display that relates to activities from Level 1 which 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**

Exhibit a display that relates to activities from Level 2 which 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.**



### **Animal Science Cat Ready4Life Challenge (SF 50137)**

#### **Open to 11- to 18-year-olds enrolled in any Cat 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.

### **Cat 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.

### **CHILD DEVELOPMENT**

#### **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. Include a list of resources you used to learn more about child development, such as mentors, books, articles, or websites. 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.

- **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. Include a list of resources you used to learn more about child care, such as mentors, books, articles, or websites. 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.

### **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 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.

### **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 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.

#### **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 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

CLOVERBUD exhibit requirements are: a poster, item or display in the project for which they are enrolled or participated in. They may choose to make anything deemed appropriate for the project. CLOVERBUDS are designed to be a special group for 5-7 year old boys and girls.

- CLOVERBUDS may not receive premiums.
- CLOVERBUDS may not exhibit any livestock.
- CLOVERBUDS may not participate in the 4-H Livestock Auction.
- 

## COMMUNICATIONS

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

### Communications 1 (SF 50368)

For 1<sup>st</sup> 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 2<sup>nd</sup> and 3<sup>rd</sup> 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 1<sup>st</sup> 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 2<sup>nd</sup> and 3<sup>rd</sup> 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 1<sup>st</sup> 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 2<sup>nd</sup> and 3<sup>rd</sup> 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 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: 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.

#### **Soybean Gallon:** (Not eligible for state fair)

Exhibit a one-gallon container of soybeans from previous year's crops.

**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.

**Corn Gallon:** (Not eligible for state fair)

Exhibit a one-gallon container of soybeans from previous year's crops.

**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.

**Small Grains Alfalfa:** (not eligible for state fair)

1 baled flake from current year's crop.

**Small Grains Grass Hay:** (not eligible for state fair)

1 baled flake from current year's crop.

**Small Grains Clover Hay:** (not eligible for state fair)

1 baled flake from current year's crop.

**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.

## **DOG**

- 1. Quality Assurance and Ethics Certification (QAEC) required for 4-H Youth enrolled in project.**

### **Dog Care**

#### **Dog Obedience**

- Beginner Novice I Class (For inexperienced handlers and inexperienced dogs)
- Beginner Novice II Class (For experienced handlers and inexperienced dogs OR experienced dogs and inexperienced handlers)
- Preferred Novice Class
- Novice Class
- Graduate Novice Class (subject to availability)
- Preferred Open Class (subject to availability)
- Open Class (subject to availability)
- Graduate Open Class (subject to availability)

#### **Rally Obedience**-subject to availability

- Rally Novice Class
  - Rally Intermediate Class
  - Rally Advanced Class
  - Rally Excellent Class
1. The same dog may not be entered in more than one obedience class but maybe used in a Rally class.
  2. The dog being shown must be trained by and owned or leased by the exhibiting 4-H member. If a leased animal is used, the signed lease agreement must be on file in the Extension Office by May 1 of the current year along with a current color photo of the dog.
  3. Written certification must be available on the day of the show to verify current rabies, distemper, parvo, corona virus, para-influenza, hepatitis and leptospirosis vaccinations.
  4. Dogs being shown in obedience must be brought to the show on a six foot lead (leather, nylon or canvas) and an appropriate collar.
  5. Current AKC rules will be used in judging.
  6. Spike collars or tags hanging from collars will not be allowed.
  7. A run-off will be held in case of ties in total scores.
  8. If a female is in season at fair time, superintendents must be notified BEFORE the day of the show and provisions will be made for the individual to show.
  9. The committee will act upon special problems not covered by these rules.
  10. Classes are subject to committee review; check the current 4-H Clover for changes.

#### **Animal Science Dog Ready4Life Challenge:** (SF 50137)

##### **Open to 11- to 18-year-olds enrolled in any animal 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.

#### **Dog 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 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.

## **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 1/2" x 4 1/2").
- 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 1/2" x 4 1/2" in size)
4. Comb Honey- 3 sections (honey built by bees in frames of wood commonly called "sections" (boxes are usually 4 1/2" x 4 1/2" 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 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.

## **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.

## **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 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.

## FOODS & NUTRITION

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

### 4-H Cooking 101: (SF 50200)

You may exhibit any/all of the options.

Using the recipes included in the project manual, prepare an exhibit of:

- 3 Cereal Marshmallow Bars (2 inch squares)
- 3 Oatmeal Drop Cookies
- 3 Peanut Butter Cookies
- 3 Jackpot Drop Cookies
- 3 Chocolate Crinkles
- ¼ of 8" square or round Coffeecake
- 3 Brownies (2 inch squares) **NOT STATE FAIR ELIGIBLE**
- 3 pieces of Cornbread (2 inch squares) **NOT STATE FAIR ELIGIBLE**
- Zoo Snacks (1 cup in plastic bag) **NOT STATE FAIR ELIGIBLE**

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)

You may exhibit any/all of the options.

Using the recipes included in the project manual, prepare an exhibit of:

- 3 Cheese Muffins
- 3 Scones
- 1 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)

You may exhibit any/all of the options.

Using the recipes included in the project manual, prepare an exhibit of:

- 3 Dinner Rolls
- loaf of Yeast Bread
- 1 Swedish Tea Ring
- 3 Cinnamon Rolls
- 1 layer of a Rich White Cake (top side up (without frosting)
- 1 layer of a 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)

You may exhibit any/all of the options.

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)
- 1 baked pie shell – traditional, oil, or whole wheat (no graham cracker)
- ¼ Golden Sponge Cake, top side up, without frosting
- ½ loaf French Bread.
- ¼ Angel Food Cake **NOT STATE FAIR ELIGIBLE**
- Microwave Fudge (3 pieces) **NOT STATE FAIR ELIGIBLE**

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 - 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/packaging (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](http://www.homefoodpreservation.com) or [web.extension.illinois.edu/foodpreservation/](http://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.

### **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.

## **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 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**).

**GOATS: Classes are subject to change. Complete list of classes are available when registering for exhibit.**

1. **Youth for the Quality Care of Animals (YQCA) certification is required-** All 4-H exhibitors of these animals: **dairy cattle, beef cattle, swine, sheep, and goats**, will be required to certify in the YQCA program each year starting for the 2020 show season.

**Breeds: Dairy, Meat (including Boars, Kikos & Fainting Savannas) and Pygmy**

### **Animal Science Goats Ready4Life Challenge (SF 50137)**

#### **Open to 11- to 18-year-olds enrolled in any Goat 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.

### **Goats 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.

### **HORSE – Unit 15 Combined Horse Show**

#### **1. Quality Assurance and Ethics Certification (QAEC) required for 4-H Youth enrolled in project.**

#### **Rules**

2. Equine Headgear-All 4-H members are required to wear a properly fitted ASTM or SEI standard F1163 (or above) certified equestrian helmet whenever mounted or driving at all 4-H horse and pony events, shows, activities, or practices. Original tags must be present in all approved helmets.
3. It is HIGHLY recommended members attend a clinic presented by Extension or another outside source.
4. Must have current negative Coggins test.
5. "Guidelines for 4-H Horse Shows" will be followed.
6. The Judge, superintendent, or Extension staff may dismiss from any class, show or grounds, any exhibitor who is cruel and abusive of any equine, fails to follow or obey instruction, cannot maintain control of an unruly horse or fails to cooperate with show management or other exhibitors.
7. For leased horses –an agreement and photo of each side of the horse must be on file in the Extension office by May 1 of the current year.
8. A horse may be shared by members of the same family.
9. No Stallions are allowed.
10. Each exhibitor is permitted only one entry in each class.
11. In each class there may only be one rider per horse.
12. Junior Exhibitor: 8-13 years old as of September 1 of the current 4-H year.
13. Senior Exhibitor: 14-19 years old as of September 1 of the current 4-H year.
14. Western wear: Western hat/helmet, pants/jeans and a long sleeve buttoned shirt with collar. Chaps are optional. English wear: English helmet, collared shirt, breeches/jodhpurs and boots are required.
15. Registration will be made through 4H Online.
16. Exhibitors will be awarded an A, B, or C rating.
17. An overall winner of each class will be selected.
18. Judges decision is final.

## Classes

1. **Sr. Showmanship**- Shall be judged strictly on the 4-Her's ability to fit, groom and show his/her horse at Halter. Conformation does NOT count. English or Western tack/attire maybe used. Individual patterns will be used. English or Western tack/attire.
2. **Jr. Showmanship** - Shall be judged strictly on the 4-Her's ability to fit, groom and show his/her horse at Halter. Conformation does NOT count. English or Western tack/attire maybe used. Individual patterns will be used. English or Western tack/attire.
3. **Sr. English Pleasure** - Will be judged at the walk, trot, and canter both directions of the arena. Horses will be required to back. The horse is judged more than the rider and will be judged on performance, manners and way of going. English tack/attire only.
4. **Jr. English Pleasure** - Will be judged at the walk, trot, and canter both directions of the arena. Horses will be required to back. The horse is judged more than the rider and will be judged on performance, manners and way of going. English tack/attire only.
5. **Sr. English Equitation** - To be judged on the ability of the rider, seat, hands, body and leg positions and the ability to control and show the horse. A combined performance of the rider and the horse at a walk, trot, canter and backing. A pattern will be used. English tack/attire only.
6. **Jr. English Equitation** - To be judged on the ability of the rider, seat, hands, body and leg positions and the ability to control and show the horse. A combined performance of the rider and the horse at a walk, trot, canter and backing. A pattern will be used. English tack/attire only.
7. **Sr. Western Pleasure** - Will be judged at the walk, jog, and lope both directions of the arena. Horses will be required to back. The horse is judged more than the rider and will be judged on performance, manners and way of going. Western tack/attire only.
8. **Jr. Western Pleasure** - Will be judged at the walk, jog, and lope both directions of the arena. Horses will be required to back. The horse is judged more than the rider and will be judged on performance, manners and way of going. Western tack/attire only.
9. **Sr. Western Horsemanship** - Riders to be judged more than the horse & will be judged on seat, hands, legs and the ability to control and show the horse displaying a precise ride in total unison with their horse. A Pattern will be used, including walk, jog, and lope. Exhibitors may also be asked by the judge question about tack, anatomy, horsemanship, etc. Western tack/attire only.
10. **Jr. Western Horsemanship** - Riders to be judged more than the horse & will be judged on seat, hands, legs and the ability to control and show the horse displaying a precise ride in total unison with their horse. A Pattern will be used, including walk, jog, and lope. Exhibitors may also be asked by the judge question about tack, anatomy, horsemanship, etc. Western tack/attire only.
11. **Open Walk/Trot** - Will be judged at the walk, jog/trot both directions of the arena. Horses will be required to back. Class is open to all and all are encouraged to enter. English or Western tack/attire.
12. **Sr. Ranch Pleasure** - Will be judged at the walk, trot and lope both directions of the arena. Judge can request exhibitor to show their horse/pony at an extended walk, extended trot and extended lope. Horses will be required to back. The overall manners and responsiveness of the horse while performing each gait requirements, and the horse's quality of movement are the primary considerations. Western tack/attire only.
13. **Jr. Ranch Pleasure** - Will be judged at the walk, trot and lope both directions of the arena. Judge can request exhibitor to show their horse/pony at an extended walk, extended trot and extended lope. Horses will be required to back. The overall manners and responsiveness of the horse while performing each gait requirements, and the horse's quality of movement are the primary considerations. Western tack/attire only.
14. **Sr. Trail** – Based on horse's willingness to negotiate obstacles. English or Western tack/attire. Will be judged at the walk, jog/trot and lope/canter
15. **Jr. Trail** – Based on horse's willingness to negotiate obstacles. English or Western tack/attire. Will be judged at the walk and jog/trot.
16. **Trot Barrels** – exhibitors in this class cannot compete in barrels, flags or poles. English or Western tack/attire.
17. **Barrels** – exhibitors in this class cannot compete in trot barrels, trot flags, or trot poles. English or Western tack/attire.
18. **Flags** – exhibitors in this class cannot compete in trot barrels, trot flags or trot poles. English or Western tack/attire.
19. **Trot Flags** – exhibitors in this class cannot compete in barrels, flags or poles. English or Western tack/attire.
20. **Trot Poles** – exhibitors in this class cannot compete in barrels, flags, or poles. English or Western tack/attire.



21. **Poles** – exhibitors in this class cannot compete in trot barrels, trot flags, or trot poles. English or Western tack/attire.
22. **Novelty Class** – to be determined day of show. Class is open to all and all are encouraged to enter. No horse/pony will be required. English or Western attire.

### **Animal Science Horse Ready4Life Challenge (SF 50137)**

#### **Open to 11- to 18-year-olds enrolled in any Horse 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.

### **Horse 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.

### **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.

- Herbs dried and exhibited in an artistic display should be exhibited in this area.

#### **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)	

Squash, winter (Acorn, buttercup, spaghetti, Hubbard, Turks's Turban) (1)

Beans, Snap, Green Pod or Golden Wax (12 pods)

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.

- Herbs in pots or jars should be exhibited in this area.

### **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 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.

### **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 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.

### **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.

### **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 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.

### **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 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.

### **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 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.

### **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 8x10 Black and White photograph.  
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 **AND/OR**
- Exhibit one framed 8"x10" photo, which demonstrates your understanding of another technique you, learned from your Photography 1 project manual. Or a poster with 3-5 photos telling a story. 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; **AND/OR**
- Exhibit one framed 8"x10" photo which demonstrates your understanding of another 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; **AND/OR**
- Exhibit one framed 8"x10" photo which demonstrates your understanding of another 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.

**POULTRY – Classes subject to change. Complete list of classes are available when registering for exhibit.**

1. **Quality Assurance and Ethics Certification (QAEC) required for 4-H Youth enrolled in project.**
2. Your invoice or receipt will be required to show the Fair Veterinarian. If you hatched your own poultry, your NPIP Approval Number will be required to show the Fair Veterinarian.
3. All poultry must have been hatched during the current year.
4. Pen to consist of one cockerel and two pullets.
5. Only exhibits from the meat classes of poultry may be sold in the 4-H auction.
6. Eggs will be exhibited under the poultry division. One dozen eggs (white or brown) will be the exhibit requirement.
7. Turkeys and waterfowl will be exhibited in the poultry division.
8. Classes offered are subject to change.

<p><b>Large Fowl-Cockerel or Pullet</b> Rhode Island Rd (S.C. or R.C.) AOV American Class Any Continental or any other Standard Breed English Asiatic Hybrid-dual purpose or egg (NO White Rock) Cornish Cross allowed Mediterranean</p>	<p><b>Bantams-Cockerel or Pullet</b> Featherleg Single Comb Clean Leg Rose Comb Clean Leg Modern, Old English, American Game AOCCL</p>	<p><b>Miscellaneous Birds-Cockerel or Pullet</b></p>
<p><b>Waterfowl-Drake or Duck</b> Heavy Ducks Medium, Light or Bantam Ducks <b>Geese-Gander or Goose</b></p>	<p><b>Trios (Birds will be weighed)</b> Broiler (any breed or sex, 3 lbs. maximum weight/bird) Baker (any breed or sex, 8 lbs. maximum weight/bird)</p>	

**Animal Science Poultry Ready4Life Challenge (SF 50137)**

**Open to 11- to 18-year-olds enrolled in any Poultry 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.

**Poultry 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.

**RABBIT: Classes are subject to change. Complete list of classes are available when registering for exhibit.**

1. **Quality Assurance and Ethics Certification (QAEC) required for 4-H Youth enrolled in project.**
2. Only exhibits from the meat classes of rabbits may be sold in the 4-H Auction.
3. 4-H member are responsible for reporting to the Department Superintendent if he/she wishes to sell a meat pen at the 4-H auction.
4. Junior rabbits are rabbits less than 6 months of age and senior rabbits are 6 months or older. Date for determining age is the date of the show.

<b>Breeds: Dutch, Florida Whites, Havana, New Zealand (all colors), California, Lops (all breeds), All Rex, All Satin, AOB</b>		
<b>Senor Buck</b> 6-8 month Buck	<b>Senior Doe</b> 6-8 month Doe	<b>Junior Buck</b> less than 6 months of age by date of show <b>Junior Doe</b> less than 6 months of age by date of show
<b>Single Fryer</b> May take single fryer from meat class or just a single rabbit	<b>Young Meat Pen</b> Three rabbits, any breed or sex, 5.5 lbs. per head maximum weight	

**Animal Science Rabbits Ready4Life Challenge (SF 50137)**

**Open to 11- to 18-year-olds enrolled in any Rabbit 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.

**Rabbits 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.

### **SHEEP – Class subject to change. Complete list of classes are available when registering for exhibit.**

1. **Youth for the Quality Care of Animals (YQCA) certification is required-** All 4-H exhibitors of these animals: **dairy cattle, beef cattle, swine, sheep, and goats**, will be required to certify in the YQCA program each year starting for the 2020 show season.
2. All market lambs MUST be docked and castrated.
3. All purebred-breeding animals must be registered in the name of the exhibitor and must have an ear tag.
4. Date for computing age of sheep will be September 1<sup>st</sup> of the previous year.
5. ALL rams must be purebred.
6. ALL sheep must be docked.
7. Sheep in all classes must be fitted.

<b>Breeds: Columbia, Hampshire, Montadale, Oxford, Suffolk, Shropshire, Dorset, Southdown, AOB/Crossbred</b> Classes will be listed when registering.
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### **Animal Science Sheep Ready4Life Challenge (SF 50137)**

#### **Open to 11- to 18-year-olds enrolled in any Sheep 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.



### **Sheep 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.

### **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 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**).

### **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.

### **SMALL PETS**-see also Animal Science

#### **Animal Science Guinea Pig Display (SF 50135)**

Prepare a display focusing on any activity related to the small pets 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 Small Pets / Guinea Pig Ready4Life Challenge (SF 50137)**

##### **Open to 11- to 18-year-olds enrolled in any Small Pets 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 Pets 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.

## **SWINE – Complete list of classes are available when registering for exhibit.**

1. **Youth for the Quality Care of Animals (YQCA) certification is required-** All 4-H exhibitors of these animals: **dairy cattle, beef cattle, swine, sheep, and goats**, will be required to certify in the YQCA program each year starting for the 2020 show season.
2. All hogs must be individually earnotched.
3. Litters must all be from the same sow and carry the same litter earnotch and can be a combination of one boar, one barrow, and one gilt or two gilts and one boar or one barrow.
4. All swine must have been farrowed on or after January 1 of the current year.
5. Registration papers will be checked at the time of placement. Each pig must have its own papers.
6. Commercial gilts may be a crossbred or a purebred not eligible for registry.
7. Senior animals must be born January 15 – February 10 of the current year and all junior animals must be born after February 11.

**Breeds: Berkshire, Chester White, Duroc, Hampshire, Poland China, Spotted Hogs, Yorkshire, AOB, Crossbred**

Classes will be listed when registering.

### **Animal Science Swine Ready4Life Challenge (SF 50137)**

#### **Open to 11- to 18-year-olds enrolled in any Swine 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.

### **Swine 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**).

## **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 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.

## **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 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**).

**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 7<sup>th</sup> 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 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.

### **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 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.