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**DUPAGE COUNTY EXTENSION OFFICE**

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*Thank you to all the 4-H volunteers, parents, and members for making this a successful fair!*

Thank you to the following for their 2018 DuPage County 4-H trophy donations.

4-H Clovers 4-H Club	Just Say Nay 4-H Club
Bensenville HCE	Eleanor McCaslin
Carso Family	Quetsch Family
Cloverdale Maidens & Company 4-H Club	Stukel Family
Bobbi Ehlers	Carly Swanson
Ethel Marshall HCE	Trail's End Farm - Marilyn Goodrich
Green Valley HCE	Coleen Walter
Patricia Houle	Warrenville Grove Animal Hospital

***Mark Your Calendars...***

Public Presentations Registration Due March 22, 2019  
Dog, Horse, Fair Project Enrollment Due April 1, 2019  
Activity Waiver Due April 1, 2019  
Public Presentations Judging Event – April 6, 2019 (Kendall County Extension Office)  
Horse Ownership/Lease Paperwork Due May 1, 2019  
Dog, Horse, Fair Registration Due May 31, 2019  
Public Presentations State Competition – June 8, 2019 (Decatur)  
Horse Clinic – June 8, 2019 (Kane County Fairgrounds)  
Dog Show – June 19, 2019 (Kane County Fairgrounds)  
Horse Show – June 22, 2019 (Kane County Fairgrounds)  
State Fair Horse Show – July 22-28, 2019 (Springfield)  
4-H Fair Non-livestock Judging - July 22-23, 2019 (DuPage County Fairgrounds)  
4-H Livestock Judging – July 24-27, 2019 (DuPage County Fairgrounds)  
DuPage County Fair – July 24-28, 2019 (DuPage County Fairgrounds)  
Illinois State Fair – August 9-19, 2019 (Springfield)  
DuPage Day @ State Fair – August 9, 2019 (Springfield)  
4-H State Dog Show - August 24, 2019 (Dixon)

## DuPage County 4-H Show General Eligibility Rules

These rules apply to all 4-H classes and 4-H exhibitors.

All 4-H Projects except animals will be located at the DuPage County Fairgrounds (Building 2).

1. While every care and precaution is being exercised, the sponsoring organizations cannot be responsible for: loss or damage to property of exhibitors, injury to individuals or livestock, theft or accident.
2. All exhibitors must be enrolled in 4-H Online **by 11:59 p.m. Monday, April 1**. Only projects listed on the enrollment records may be shown. All exhibits must be this year's work and may only be shown in ONE project area and class.
3. Entries are required for all classes. All Entries must be submitted in Fair Entry **by 11:59 p.m. on Friday, May 31.**
4. Table displays are limited to 2' wide x 15" deep unless otherwise stated in the class listings for that project. (standard science display/tri-fold boards fit into this size limitation.) The maximum poster size for hanging is 22" x 30".
5. Exhibitors are limited to one (1) entry per class, **EXCEPT** in Beef, Dairy Goats, Sheep, Swine, Rabbits, and Poultry where two (2) entries are allowed.
6. Exhibits will be judged against a set of standards for each project. **Judges' decisions are final.** Ribbons will be awarded according to the following level of achievement:

BLUE RIBBON	Project meets the standards
RED RIBBON	Project needs improvement
WHITE RIBBON	Project needs much improvement
GREEN RIBBON	Participation in event is recognized

7. If merited, Class Champions (purple ribbon) are selected from among the blue ribbon winners in each project area, except livestock. Reserve and Champion awards may be selected from the Class Champions in each project area, except livestock.
8. Livestock Class Champion ribbons will be awarded to the first two animals in the BLUE AWARD group in all classes.
9. Exhibits illustrating inappropriate subject matter and/or graphics are not acceptable. Extension staff reserves the right not to display exhibits deemed inappropriate for youth audiences. Items deemed potentially dangerous to fair-goers may be removed from the building.
10. Conference judging is the method used to evaluate all non-livestock exhibits. For information on this method of judging, visit the following link:  
<http://web.extension.illinois.edu/dupage/4hfairbook/index.html>. Click on the Forms & Downloads button and look for the "Conference Judging" fact sheets.

11. 4-H members not participating in conference judging must provide written answers to the questions below to Patty Luster by July 1, 2019: Written answers should be included with the exhibit. If not provided by July 1, 2019, award will be lowered one level.

- What process was followed in making the exhibit?
- What did you learn?
- What might you do differently next time?

12. Only 4-H members who are checking in their exhibits or are being judged are permitted in the check-in/judging area. Parents are not allowed in the judging area.

13. Late entries will be penalized. There is no guarantee that late entries will be judged. If late entries are judged, the exhibit will automatically be lowered one rating. If the exhibit can't be judged, the exhibitor will receive a participation ribbon. All projects must be checked in at their respective project areas by the check-in deadline.

14. Extension staff may divide or combine classes depending on size and nature of entries.

15. 4-H members wishing to exhibit in the OPEN CLASS must comply with the rules of the Fair Board governing those classes.

16. **4-H MEMBERS CANNOT SHOW THE SAME EXHIBIT IN OPEN AND 4-H CLASS.** However, 4-H members may exhibit a previous year's 4-H project in any OPEN CLASS that is appropriate.

17. For exhibits in the BARN ONLY, 4-H members can show the same animal(s) in both Open and 4-H Class.

18. 4-H exhibitors may be furnished with a fair pass or armband, which must be presented to enter the Fairgrounds.

19. 4-H exhibits will not be open to the public until Wednesday at noon.

20. **A list of eligible State Fair Delegates will be posted in Building 2 at the DuPage County Fairgrounds. Eligible State Fair Delegates must acknowledge participation by signing the board by 5:00 p.m. on Friday, July 26. Alternates have until 5:00 p.m. on Saturday, July 27, to sign the board to be eligible to fill any vacant delegate spots. All State Fair registration paperwork must be completed and submitted to the Extension Office by 4:00 p.m. on Monday, July 29.**

21. All trophies will be presented at the Fair Awards Program scheduled TBA. All trophy recipients or a designated representative SHOULD BE present to accept the award(s).

22. **RELEASE TIME FOR EXHIBITS** - 4-H exhibits will be released on Sunday, July 28, at the following times: Beef, Dairy, Goat, Sheep, Swine @ 6:00 p.m.; all other 4-H exhibits @ 6:00 p.m. – 7:00 p.m. All food products will be disposed of by the superintendents. Canning jars will be available for pick up. Extension is not responsible for exhibits left after 7:00 p.m. Sunday. Projects not claimed by 7:00 p.m. Sunday will be left at the Fairgrounds and are at risk of being discarded.

23. 4-H members are eligible for only one (1) premium per exhibit class. This includes livestock market classes.

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

**Premium Book.**

Premiums will be figured and distributed after the close of the 4-H year. The amount of premiums paid is determined by placing, number of exhibits and the amount of money allocated by the State 4-H Fund. In DuPage County premiums are paid based on the X factor: a Blue ribbon is equal to 3 X, a Red ribbon is equal to 2 X, and a White ribbon is equal to 1 X.

25. INNOVATION CLASSES are open to any 4-H member who was at least 13 by September 1, 2018. Members choosing to exhibit in the Innovation class may be enrolled in any level of the project they are studying. Members choosing to exhibit in the Innovation class decide the best way to show off their project mastery and knowledge for the year in that project category. Some suggestions are provided for each category, but members may choose any method they want for demonstrating project learning as long as it does not fit in any other class in that category. Only selected projects categories have an Innovation option.

26. READY4LIFE Challenge open to 11- to 18-year olds. Members choosing to exhibit in the Ready4Life Challenge may be enrolled in any level of the project they are studying. Exhibits should show the connection between the project area and related career or business opportunities. Members may choose any method they want for demonstrating project learning. Counties are eligible to send one Ready4Life exhibit for each project category in addition to the total allowed for that division.

28. MAKER Class - 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.) and MUST include a detailed build log and bill of materials. A 3D printed or laser cut object alone does not qualify for this class. Projects will be judged on originality, real world applications and market viability, ability to explain design process and concepts, as well as the appearance and build log/bill of materials.

27. Any changes or corrections to 4-H fair regulations and all additional fair information will be **sent out through an E-Mail Update and/or be posted on the DuPage website at:**  
<http://web.extension.illinois.edu/dkk/>.

28. If you need a reasonable accommodation to participate in the 4-H portion of the DuPage County Fair, please contact Patty Luster, 4-H Coordinator, at the following address and/or phone number: University of Illinois Extension – DuPage Unit, 1100 E Warrenville RD, Suite 170, Naperville, IL 60563, (630) 955-1123 X18, or email [pluster@illinois.edu](mailto:pluster@illinois.edu), at least two weeks prior to the event.

29. Interpretation of the rules and regulations is the responsibility of Extension Staff with support from superintendents and/or the 4-H Fair Committee. Exhibitors must agree to abide by these interpretations.

30. All exhibits must be the work of the 4-H member.

31. Entries that do not meet one or more exhibit requirement rules will be lowered one rating.

32. To encourage a well-rounded 4-H experience, each youth must participate in a minimum of four 4-H meetings, tours, workshops, and/or other 4-H activities to be considered a 4-H member in DuPage County. Those who do not meet this requirement will NOT be eligible to take part in 4-H exhibitions, receive 4-H premiums or other 4-H awards and recognition that are available to 4-H members.

33. All Projects must be checked in at each of their respective project areas by the check-in deadline. Judging will begin as soon as projects are checked-in and will continue through the check-in deadline. Some project judging may run longer depending on the number of entries. **See table below for project listing and check-in date and time.**

34. **MENTION OF PRODUCT, SERVICE OR COMPANY NAMES IN THIS PUBLICATION IN NO WAY IMPLIES AN ENDORSEMENT BY UNIVERSITY OF ILLINOIS EXTENSION.**

### CHECK-IN AND CONFERENCE JUDGING SCHEDULE

Jr. Superintendents will be required to check in from 12:30 - 1:00 p.m. on the day of their superintending role

<b>Date</b>	<b>Project Area</b>	<b>Check-in start</b>	<b>Check-in</b>	<b>Location</b>
April 6, 2019	Public Presentations	12:00 p.m.	12:30 p.m.	Kendall County Extension Office
July 22, 2019	Animal Science, Cloverbuds, Exploratory, Leadership, Photography, Theatre Arts, Veterinary Science, Video/Filmmaking, Visual Arts	1:00 p.m.	3:30 p.m.	DuPage County Fairgrounds
July 23, 2019	Aerospace, Bicycle, Civic Engagement, Clothing & Textiles, Shopping, College & Career Readiness, Communications, Computer Science, Consumer Ed., Crops, Electricity, Entomology (General & Beekeeping), Foods & Nutrition, Forestry, Geology; Geospatial, Health, Horticulture, Intercultural, Interior Design, Natural Resources; Plants & Soils, Robotics, Shooting Sports, Small Engines, Technologies, Tractor, Welding, Woodworking	1:00 p.m.	3:30 p.m.	DuPage County Fairgrounds



### LIVESTOCK CHECK-IN AND JUDGING

All Sheep, Poultry, Beef, Swine, Goat, Dairy Cattle and Rabbit exhibitors must check-in their animals Tuesday, July 23, between the hours of 8:00 a.m. and 8:00 p.m. Market animals are requested to be checked in by 6:00 p.m. Animals not weighed in will not be able to show in market classes. Livestock questions, contact Bonnie Paganis: [bonnie@dupagecountyfair.org](mailto:bonnie@dupagecountyfair.org) or (630) 464-1752.

Species	Location	Day	Date	Time
Beef	Livestock Show Ring	Wednesday	July 24	2:00 p.m.
Poultry	Poultry Barn	Wednesday	July 24	8:30 a.m.
Sheep	Tent Show Ring	Wednesday	July 24	8:00 a.m.
Goats	Goat Barn	Thursday	July 25	9:00 a.m.
Swine	Livestock Show Ring	Thursday	July 25	9:00 a.m.
Dairy	Livestock Show Ring	Friday	July 26	8:00 a.m.
Rabbits	Rabbit Barn	Friday	July 26	8:30 a.m.

#### 4-H Animals Eligibility Rules

If you plan to show beef, sheep, swine, dairy cattle, goats, poultry, or rabbits, you are required to have a premise ID. Premise registration is free and can be performed online at [www.agr.state.il.us/premiseid](http://www.agr.state.il.us/premiseid) or by calling 866/299-9256 for a paper form.

1. ALL 4-H EXHIBITORS PLANNING TO SHOW BEEF, CATS, DAIRY, DOGS, GOATS, POULTRY, RABBITS, SHEEP, SWINE, OR HORSES AND PONIES AT STATE AND COUNTY FAIRS MUST SHOW PROOF OF ATTENDING A QUALITY ASSURANCE AND ETHICS TRAINING SESSION.
2. **All Livestock exhibitors must comply with the General Rules and Regulations.**
3. Check 2019 Illinois Exhibition Livestock Health Requirements pertaining to your project. See Illinois Livestock Health Regulations <http://www.agr.state.il.us/AnimalHW/CountyFairRules.pdf>. All livestock must adhere to these health rules. Each livestock exhibitor is responsible for obtaining his own health certificate. Department superintendents will collect health papers to check them before animals are unloaded.
4. Any surgical procedure or injection of any foreign substance or drug or the external application of any substance (irritant, counterirritant, or similar substance) which could affect the animal's performance or alter its natural contour, conformation, or appearance, except external applications of substances to the hoofs or horns of animals which affect appearance only and except for surgical procedures performed by a duly licensed veterinarian for the sole purpose of protecting the health of the animal, is prohibited.
5. A veterinarian will be available at a pre-determined time. Superintendent will let exhibitors know time at check-in.
6. Registration papers are required in all purebred classes and must show **ownership of the animals in the name of the 4-H member only** by the latest starting date of project. Registration papers will be checked by department superintendents. Registration papers must be in the hands of the exhibitor during the show.
7. No advance entry is required in Champion or Showmanship classes.
8. If only one animal is shown in a class, rating will be based on standard breed characteristics.
9. All pens and stalls are to be assigned by the superintendent or assistants at Check-in Time. Animals must be stalled or penned according to these assignments. Placement of bedding will not reserve pen.
10. Each animal **MUST** be fed and watered and space cleaned at least twice daily. Bedding material must be removed and replaced with fresh bedding daily. **FIRST** cleaning **MUST** be done before 10 a.m. each day.
11. **All animals must be shown by the owners** (except 2nd animal in class may be shown by another 4-H member).
12. The first two animals in the blue award group in all classes will be considered for Championship Awards.
13. Exhibitors must wear exhibitor numbers while in show arena. Additional cards may be obtained at the Show Ring for classes where 2 entries are allowed.

14. No 4-H animals are allowed to be fitted or groomed by a paid professional fitter without hands-on 4-H member participation.

15. 4-H members are expected to conduct themselves in a manner that will be a credit to the 4-H program. Individuals showing animals should wear showmanship attire (i.e., closed toe shoes, jeans, dress shirt or 4-H shirt).

**4-H Beef**

Judging Time: 2:00 p.m., Wednesday, July 24 – Show Ring

Check-in Time: 8:00 a.m. – 8:00 p.m., Tuesday, July 23

Weigh-in Time: 4:00 p.m.-8:00 p.m., Tuesday July 23

1. Exhibitors must comply with Health Regulations and General 4-H Rules.
2. Market animals may be Purebred, Grade, or Crossbred and must have been dropped on or after January 1, 2017.
3. Entries in purebred classes must be purebred and registered in the name of the exhibitor, and will be subject to check by a permanent tattoo that is fully healed and readable.
4. No heifers will be shown in Steer Classes.
5. All steers must be the property of the member exhibiting since February 1, 2018, verified by tattoo.
6. A neck rope must be used on all animals when in stalls.
7. No fitting stalls will be allowed in barns.
8. No professional fitters without 4-H member’s participation.
9. All steers may be subject to a white towel test.
10. All market classes must be weighed in by 8:00 p.m. on Tuesday of Fair week.
11. Steers will be divided equally into weight divisions at the time of weighing. Enter your steers in the lightweight division of each breed.
12. **A premise ID will be required on show registration form to exhibit all livestock. Please see page 6 for more information.**

**BREEDS**

<b>BREEDING CLASSES</b>	Angus	Hereford	Simmental	Shorthorn	AOB
<b>2019 Ownership deadlines are as follows:</b> January 1 – Beef, Performance cow February 1 – Beef, Steer  June 1 – Beef, Heifers					
Heifer-Calf, b. 9-1-18 to 7-1-19					
Heifer-Jr. Yearling, b. 3-1-18 to 8-31-18					
Heifer-Sr. Yearling, b. 9-1-17 to 2-28-18					
Cow, b. 8-31-17 or older					

<b>MARKET CLASSES</b>	Angus	Hereford	Simmental	Shorthorn	AOB	Grade/Cross
<b>2019 Ownership deadlines are as follows:</b> January 1 – Beef, Performance Cow February 1 – Beef, Steer June 1 – Beef, Heifers						
Steer – Light						
Steer – Medium						
Steer – Heavy						
Market Heifer						

**Rate of Gain** Animals must have been weighed on or before annual deadline by supervising committee. Awards will be presented as follows:

- "Blue" rating -- 2.75 or more pounds per day from weigh-in.
- "Red" rating -- 2.01-2.749 pounds per day from weigh-in.
- "White" rating –2.0 pounds or less per day from weigh-in

**Individual Exhibit** - 1 Exhibitor with 2 animals.

**SPECIAL AWARDS**

SHOWMANSHIP (4-H age 14 and over)	ROSETTE & TROPHY
JR. SHOWMANSHIP (4-H age 8-13)	ROSETTE & TROPHY
CHAMPION BEEF BREEDING FEMALE	ROSETTE & TROPHY
RESERVE CHAMPION BEEF BREEDING FEMALE	ROSETTE
BEST OF BREED FEMALE (EACH BREED)	ROSETTE
CHAMPION BEEF STEER	ROSETTE
RESERVE CHAMPION BEEF STEER	ROSETTE
BEST OF BREED STEER (EACH BREED)	ROSETTE
CHAMPION MARKET HEIFER	ROSETTE
RESERVE CHAMPION MARKET HEIFER	ROSETTE
CHAMPION MARKET BEEF	ROSETTE & TROPHY
RESERVE CHAMPION MARKET BEEF	ROSETTE
CHAMPION RATE OF GAIN	ROSETTE & TROPHY
RESERVE CHAMPION RATE OF GAIN	ROSETTE

**4-H Poultry**

Judging time: 8:30 a.m. – Wednesday, July 24 – Poultry Barn

Check-in Time: 8:00 a.m. - 8:00 p.m., Tuesday, July 23

1. Exhibitors must comply with the Illinois Livestock Health Regulations and General 4-H Rules.
2. 2019 Ownership deadlines is as follows: May 1 - Poultry
3. A certificate showing negative pullorum test must be presented to the superintendent at time of check-in.. Pullorum test TBA (a nominal fee will be charged). Testing after this date will be by appointment only and not guaranteed. **Absolutely no testing at the Fair.**
4. Coops and bedding will be furnished (except doves and quails-exhibitors must bring own cages).
5. All animals must be shown by the owner during judging. **Please note: A table show will be incorporated for the poultry judging again this year. This means the 4-H member will need to bring his/her chicken(s) to a table to be judged along with a ticket.**
6. Each 4-H member will be assigned a bank of cages for which he/she will be responsible for keeping clean and neat during the fair.
7. If the 4-H member needs help getting his/her birds to the table, arrangements must be made with the Superintendent at check-in.
8. Light Chicken Breeds include Leghorns and Cross Hybrids.
9. Heavy Chicken Breeds include Reds, Rocks, Orpingtons, and Giants.
10. Old cock and old hen are defined as hatched prior to January 1, 2018.
11. Pigeon cages must be locked. Locks should be removed for judging.
12. Members MUST be present each day to feed, water, and care for their own poultry.
13. Member must clean cages twice daily and remove waste from building. First cleaning should be completed before 10:00 a.m. each day. Fresh bedding will be provided.
14. Food and water containers must be plastic or metal and tied down.
15. Sales slip showing proof of purchase must be available for Superintendent’s check. Sales slip or other proof must show ownership before May 1 of current year.
16. No class changes will be permitted the day of judging.
17. Ornamental chickens and bantams WILL BE DISQUALIFIED if they are debeaked.
18. **A premise ID will be required on show registration form to exhibit all livestock. Please see page 6 for more information.**
19. Poultry projects will not be allowed to leave barn before 8:00 p.m. Sunday, including those sold.

**Chicken**

**PRODUCTION CLASSES/ORNAMENTAL CLASSES**

BREEDS	Single Cockerel	Old Cock	Single Pullet	Old Hen
Heavy				
Light				

**Market animals are requested to be checked in by 6:00 p.m. on Tuesday, July 25.**

Light – 2 to 4 lbs.

Medium – 4.1 to 8 lbs.  
 Heavy – 8.1 lbs. and over

**BANTAM CHICKENS CLASSES**

BREEDS	Single Cockerel	Old Cockerel	Single Pullet	Old Hen
Single Comb Clean Legged				
Any Other Comb Clean Legged				
Single Comb Feather Legged				
Any Other Comb Feather Legged				
Barnyards				

**EGG PRODUCTION** (Exhibitors should check with Poultry Superintendent.)

**One dozen white eggs**

**One dozen other colored eggs**

**STANDARD DUCKS CLASSES**

BREEDS	Young Drake	Young Hen	Old Drake	Old Hen
Heavy				
Medium				
Light				
Bantam				

**GEESE CLASSES**

BREEDS	Young Gander	Young Goose	Old Gander	Old Goose
Heavy				
Medium				
Light				

**PIGEONS CLASSES**

	Kings	Racing Homers	Other	Other Ornament
Cock				
Hen				

**MISCELLANEOUS POULTRY CLASSES**

**Members exhibiting doves, pheasants & quail MUST furnish their own cages.**

	Pheasants	Quail	Guinea	Dove
One Male				
One Female				

**TURKEY CLASSES**

Young Male Young Female

Old Male

Old Female

**SPECIAL AWARDS**

CHAMPION BANTAM	ROSETTE & TROPHY
RESERVE CHAMPION BANTAM	ROSETTE
CHAMPION ORNAMENTAL & PRODUCTION	ROSETTE & TROPHY
RESERVE CHAMPION ORNAMENTAL & PRODUCTION	ROSETTE
CHAMPION EGG PRODUCTION	ROSETTE
RESERVE CHAMPION EGG PRODUCTION	ROSETTE
CHAMPION PIGEON	ROSETTE & TROPHY
RESERVE CHAMPION PIGEON	ROSETTE

CHAMPION DUCK	ROSETTE & TROPHY
RESERVE CHAMPION DUCK	ROSETTE
CHAMPION GOOSE	ROSETTE & TROPHY
RESERVE CHAMPION GOOSE	ROSETTE
CHAMPION MISC. POULTRY	ROSETTE & TROPHY
RESERVE CHAMPION MISC. POULTRY	ROSETTE

#### 4-H Sheep

Judging Time: 8:00 a.m., Wednesday, July 24 -- Tent Show Ring

Check-in Time: 8:00 a.m. - 8:00 p.m., Tuesday, July 23

- Exhibitors must comply with Health Regulations and General 4-H rules.
- Animals in lamb class must be born on or after September 1, 2016.
- Animals exhibited in breeding classes cannot be shown in market classes.
- A mixed pair is one male and one female (one ram and one ewe).
- All animals must be purebred and registered in the name of the exhibitor with the exception of market and grade classes.
- All lambs must be docked.
- 2019 Ownership deadlines are as follows:
  - May 15 – Sheep, wethers
  - June 1 – Sheep, ewes & rams
- REGISTRATION PAPERS MUST BE PRESENTED TO THE SUPERINTENDENT UPON ENTRY.
- A premise ID will be required on show registration form to exhibit all livestock. Please see page 6 for more information.**

#### MARKET SHEEP

Mkt. Lamb-Ewe or Wether	A Lightweight	B Middleweight	C Heavyweight
Pair of Market Lambs <b>BREEDING CLASSES</b>	A Lightweight	B Middleweight	C Heavyweight

Base date for all breeding classes is September 1.

Junior and Senior Lambs:

Split date is January 1 for Corriedale, Dorset, Hampshire, Suffolk, Montdale.

Split date is February 15 for Shropshire, Oxford, Southdown.

#### SHEEPBREEDS

	S O U T H D O W N	H A M P S H I R E	C O R R I E D A L E	S U F F O L K	M O N T A D A L E	D O R S E T	O X F O R D	P U R E B R E D	A O B
Ram, 2 years, over									
Ram, 1 yr.-2 years									
Sr. Ram Lamb									
Jr. Ram Lamb									
Pair Ram Lambs									
Aged Ewe, over 2years									
Yearling Ewe, 1 -2 years									
Sr. Ewe Lamb									
Jr. Ewe Lamb									
Pair Ewe Lambs									
Mixed Pair of Yearling									
Mixed Pair of Lambs									

#### SPECIAL AWARDS

SHOWMANSHIP (4-H age 14 and over)	ROSETTE & TROPHY
JR. SHOWMANSHIP (4-H age 8-13)	ROSETTE & TROPHY
CHAMPION MARKET LAMB	ROSETTE & TROPHY
RESERVE CHAMPION MARKET LAMB	ROSETTE
CHAMPION RAM	ROSETTE & TROPHY
RESERVE CHAMPION RAM	ROSETTE
CHAMPION EWE	ROSETTE & TROPHY
RESERVE CHAMPION EWE	ROSETTE
CHAMPION PAIR OF MARKET LAMBS	ROSETTE & TROPHY
RESERVE CHAMPION PAIR OF MARKET LAMBS	ROSETTE

#### 4-H Goats

Judging Time: 9:00 a.m., Thursday, July 25 -- Goat Barn

Check-in Time: 8:00 a.m. - 8:00 p.m., Tuesday, July 23

1. Exhibitors must comply with Dairy Goat Health Regulations and General 4-H Rules.
2. Animals may be purebred, grade, or crossbred goats.
3. All Boer and Boer X goats can **ONLY** be shown in Meat Kid class.
4. All animals must be disbudded or dehorned.
5. A milking doe is one that has freshened and is being milked regularly. All entries in milking doe class must be milking at time of show.
6. NO kids under 6 weeks to be shown.
7. Must milk out after 7:00 p.m. on the day before judging.
8. **A premise ID will be required on show registration form to exhibit all livestock.**

#### BREEDS

<b>2018 Ownership deadlines are as follows:</b> January 1 – Dairy goats, milking does May 15 – Meat goats May 1 – Dairy goats, kids & yearlings	A	N	S	L	A	G
	L	U	A	A	O	R
	P	B	A	M	B	A
	I	I	N	A		D
	N	A	E	N		E
	E	N	N	C		
				H		
Buck Kid, b.2-1-19 to 6-15-19						X
Jr. Doe Kid, b. 4-1-19 to 6-15-19						
Sr. Doe Kid, b. 11-1-18 to 3-31-19						
Dry Yearling, b.7-1-17 to 10-31-18						
Yearling. Milk Doe, b. 7-1-17 to 10-31-18						
Jr. Milking Doe, b. 7-1-16 to 6-30-17						
Int. Milking Doe, b. 7-1-14 to 6-30-16						
Sr. Milking Doe, b. before 7-1-14						
Produce of Dam (2 does of same dam)						
Get of Sire (3 does of same sire)						X
Dam & Daughter						
Dairy Wether Kid, b. 11-1-18 to 6-15-19	Wether that is, of one or cross of breeds recognized by ADGA (e.g. Boer and Boer X). Must be dehorned.					
*Meat Kid – 11-1-18 to 6-15-19 (Wether or Doe)	Wether that is, of one or cross of breeds <b>not</b> recognized by ADGA (e.g. Boer and Boer X). Must be dehorned.					

Meat class will be divided by weight (under 50 lbs. and 50 lbs. and over)

**SPECIAL AWARDS (Class Champion- Ribbon will be awarded in each breed for Juniors and Seniors)**

SHOWMANSHIP (4-H age 14 and over)	ROSETTE & TROPHY
JR. SHOWMANSHIP (4-H age 8-13)	ROSETTE & TROPHY
JR. CHAMPION DRY GOAT	ROSETTE & TROPHY
JR. RESERVE CHAMPION DRY GOAT	ROSETTE
SR. CHAMPION MILKING GOAT	ROSETTE & TROPHY
SR. RESERVE CHAMPION MILKING GOAT	ROSETTE
*CHAMPION DAIRY WETHER GOAT	ROSETTE & TROPHY
*CHAMPION MEAT GOAT	ROSETTE & TROPHY

\*Champion from each class goes into 4-H Auction. Any meat goat weighing a minimum of 50 lbs. may also go into 4-H Auction. Goats will be weighed at the fair.

**4-H Swine**

Judging Time: 9:00 a.m., Thursday, July 25 -- Show Ring

Check-in Time: 8:00 a.m. - 8:00 p.m., Tuesday, July 23

1. Exhibitors must comply with Health Regulations and General 4-H Rules.
2. All swine exhibitors who plan to participate in the auction must complete a Youth for the Quality Care of Animals (YQCA) certification. See Livestock Auction Rules.
3. 4-H members are limited to **12** head total swine, breeding and market combined. Pen space is limited and we are trying to be fair to all exhibitors.
4. 2019 Ownership deadlines are as follows
  - June 1 – Swine, barrow
  - June 1 – Swine, gilts
  - June 1 – Swine, breeding

Each animal entered must have been farrowed on or between January 15, 2018 and March 31, 2018, except purebred gilts.

5. Purebred breeding gilts must be born between January 1, 2018 and March 31, 2018.
6. Barrows may be purebred, grade, or crossbred.
7. Hybrid or crossbred breeding gilts are to show in the Grade or Crossbred class.
8. All entries in Purebred Gilt classes must be purebred and registered in the name of the exhibitor only.
9. All entries in Purebred Barrow classes must be purebred and registered in the name of the exhibitor prior to June 1 of the current year. All entries in Market Classes must be farrowed on or after January 15 and before March 31 of the current year.
10. Breeding gilts cannot be shown in the market classes.
11. Market animals will be weighed and divided equally into weight classes.
12. No gilts can be shown in both Market and Breeding classes.
13. Purebred barrow papers must be presented at scale as at State Fair. There will be NO EXCEPTIONS.
14. No crossbreds will be allowed in purebred classes.
15. Barrows without papers will be automatically added to crossbred barrow classes.
16. There will be no reweighs.
17. Entries are final - we will not allow barrows to be switched for gilts or gilts for barrows - nor will we switch around breeds (unless rule 14. applies). Pens will be assigned by Superintendents.
18. No feeding or washing of feed pans in wash rack.
19. Only wood shavings or chips furnished by the exhibitor may be used for bedding. Pens must be cleaned before 10 a.m. daily and 8 a.m. on show day.
20. A premise ID will be required on show registration form to exhibit all livestock.

**BREEDING SWINE**

	Berkshire	Chester White	Duroc	Hampshire	Poland China	Spotted	Yorkshire	AOB
Gilts b.Jan 2019								
Gilts b.Feb 2019								
Gilts b.Mar2019								

Grade or Crossbred Breeding Gilt Class (cannot be shown in Market Class)



**MARKET SWINE CLASS**

**MARKET GILTS**

Market Gilt, Light Weight  
 Market Gilt, Middle Weight  
 Market Gilt, Heavy Weight

**MARKET BARROW PUREBREDS BREEDS**

	Berkshire	Chester White	Duroc	Hampshire	Poland China	Spotted	Yorkshire	AOB
Light Weight								
Heavy Weight								

**MARKET BARROW CROSSBREDS**

Crossbred Market Barrow, Light Weight  
 Crossbred Market Barrow, Middle Weight  
 Crossbred Market Barrow, Heavy Weight

**AWARDS:** Each breed can have a Champion and Reserve Champion if merited.

**SPECIAL AWARDS – no entry required**

SHOWMANSHIP (4-H age 14 and over)	ROSETTE & TROPHY
JR. SHOWMANSHIP (4-H age 8-13)	ROSETTE & TROPHY
GRAND CHAMPION BREEDING GILT	ROSETTE & TROPHY
RESERVE GRAND CHAMPION BREEDING GILT	ROSETTE
GRAND CHAMPION BARROW	ROSETTE & TROPHY
RESERVE GRAND CHAMPION BARROW	ROSETTE
CHAMPION PUREBRED GILT	ROSETTE & TROPHY
RESERVE CHAMP PUREBRED GILT	ROSETTE
CHAMPION PUREBRED BARROW	ROSETTE & TROPHY
RESERVE CHAMP PUREBRED BARROW	ROSETTE
CHAMPION CROSSBRED BARROW	ROSETTE & TROPHY
RESERVE CHAMP CROSSBRED BARROW	ROSETTE
CHAMPION MARKET GILT	ROSETTE & TROPHY
RESERVE CHAMPION MARKET GILT	ROSETTE

**4-H Dairy Cattle**

Judging time: 8:30 a.m., Friday, July 26 – Tent Show Ring

Check In time: 8:00 a.m. - 8:00 p.m., Tuesday, July 23

1. Exhibitors must comply with Health Regulations and General 4-H Rules.
2. 2019 Ownership deadlines are as follows:
  - January 1 – Dairy, cows
  - June 1 – Dairy, calves & heifers
3. All animals in Purebred classes must be registered in name of the exhibitor.
4. Entries in the cow class may be or may not be in milk; however, all animals that have calved must show in the cow class.
5. A premise ID will be required on show registration form to exhibit all livestock. Please see page 6 for more information.

**CLASSES**

Purebred Jr. Heifer. Calf, b. 12-1-18 to 5-1-19  
 Purebred Sr. Heifer Calf, b. 9-1-18 to 11-30-18  
 Grade Jr. Heifer Calf, b. 12-1-18 to 5-1-19  
 Grade Sr. Heifer Calf, b. 9-1-18 to 11-30-18  
 Purebred Jr. Yearling, b. 3-1-18 to 8-31-18  
 Purebred Sr. Yearling, b. 9-1-17 to 2-28-17  
 Grade Jr. Yearling, b. 3-1-18 to 8-31-18  
 Grade Sr. Yearling, b. 9-1-17 to 2-28-18  
 Purebred Cow - 2 yr. old, b. 9-1-16 to 8-31-17  
 Purebred Cow - 3 yr. old, b. 9-1-15 to 8-31-16  
 Purebred Cow - 4 yrs. & over, b. before 9-1-15  
 Grade Cow, b. before 9-1-15  
 Produce of Dam - 2 females born of same Dam, any age  
 Dam & Daughter - cow and 1 female offspring, any age

**SPECIAL AWARDS**

SHOWMANSHIP (4-H age 14 or older)	ROSETTE & TROPHY
JR. SHOWMANSHIP (4-H age 8-13)	ROSETTE & TROPHY
CHAMPION DAIRY FEMALE	ROSETTE & TROPHY
RESERVE CHAMPION DAIRY FEMALE	ROSETTE

**4-H Rabbits**

Judging time: 8:30 a.m., Friday, July 26 – Rabbit Barn

Check In time: 8:00 a.m. - 8:00 p.m., Tuesday, July 23

1. MAXIMUM OF 25 RABBIT CLASS ENTRIES (BREEDS, MEAT PEN, FANCY THREE, SINGLE FRYER) PER EXHIBITOR. FUR CLASS ENTRIES WILL NOT COUNT TOWARDS THE MAXIMUM.
2. Exhibitors must comply with the Illinois Livestock Health Regulations and General 4-H Rules.
3. 2019 Ownership deadline is as follows: May 1 - Rabbits
4. All entries must be permanently ear tattooed. Please indicate tattoo number of rabbit on health certificate.
5. The tattoo number should be in the left ear and the registration (if the rabbit has one) in the right ear.
6. Rabbits will be tattooed **TBA** at the DuPage County Fairgrounds. Rabbits must be tattooed prior to day of check-in.
7. A Veterinarian or Veterinarian Tech must do a Health Inspection on all rabbits at check-in. Diseased or unfit rabbits shall be removed at the discretion of the Fair Veterinarian or Department Superintendent.
8. All rabbits must be property of the exhibitor prior to May 1.
9. Rabbits weighing less than 1 lb. by fair date will not be allowed to exhibit at the DuPage County Fair.
10. No pregnant rabbits are to be brought to the fair.
11. Only rabbits shown will be allowed in barn.
12. All ages are at the time of the show: Senior entries-over 8 months old; Intermediate entries - 6 to 8 months old; Junior entries - under 6 months old; Pre-Junior entries - under 3 months old.
13. Rabbits can be shown in either Meat Pen (commercial) or Fancy Three (fancy) but not in both. Check below for breed type.
14. Rabbits entered in a “breed type” may be entered in Fur Class, Meat Pen, Single Fryer, or Fancy Three, if the rabbit meets the requirements for the additional class.
15. No class changes the day of judging.
16. Remark cards for judging must be filled out at check-in.
17. Each individual is expected to present his/her entry or entries at the judging table for judging. Only exhibitors will be allowed in judging area during judging.
18. Cages will be furnished. Bedding will **not** be provided. Exhibitor supplies bedding, food and bowls. Rabbit cages must not have locks or chains on cages.
19. Members **MUST** be present each day prior to 10 a.m. to feed, water, and clean cage for their own rabbit.
20. Rabbits will not be allowed to leave barn before 8:00 p.m. Sunday, including those sold.
21. Decorations may not be attached to cages. No balloons allowed in barn.
22. Individual checkout of rabbits may be required at discretion of Department Superintendent.
23. A premise ID will be required on show registration form to exhibit all livestock.

**Breed types with no explicitly listed class are shown in “Other Purebred” Classes (not inclusive).**

**RABBITS – COMMERCIAL BREEDS - Champagne, Checkered Giant, Chinchilla (Standard, American, Giant), D’Argent, English Lops, New Zealand, Palominos, Satins, etc.**

**CLASSES**

BREED	Sr. Buck	Sr. Doe	Inter Buck	Inter Doe	Jr. Buck	Jr. Doe	Pre Jr. Buck	Pre Jr. Doe	Fur Class
Flemish Giant									
California									
New Zealand									
Other Purebred									

**Meat Pen (Commercial Breeds)** - A pen of 3 from one litter. Weight range from 3 1/2 to 5 lbs. Maximum age -- 69 days.

**Single Fryer (Commercial Breeds)** - Weight range from 3 1/2 to 5 lbs. Maximum age - 69 days.

**RABBITS - FANCY BREEDS - Belgian Hares, Dutch, Florida White, Polish, Rex, Silver Marten, etc.**

**CLASSES**

BREED	Sr. Buck	Sr. Doe	Jr. Buck	Jr. Doe	Fur Class
Himalayan					
Mini Rex Solid					
Mini Rex Broken					
Mini Lop Solid					
Mini Lop Broken					
Netherland Dwarf					
Holland Lop Solid					
Holland Lop Broken					
Other Purebred Fancy (listed above)					

**Fancy Three (Fancy Breeds)** - 3 rabbits from same litter; maximum of 6 months, minimum of 1 lb. Rabbits judged on uniformity of their breed.

**RABBITS - WOOLY BREEDS - Angoras, Jersey, Woolies, Lionheads, etc.**

**CLASSES**

BREED	Sr. Buck	Sr. Doe	Jr. Buck	Jr. Doe	Fur Class
Woolies					

**RABBITS – GRADECLASSES**

	Sr. Buck	Sr. Doe	Jr. Buck	Jr. Doe
Grades				

**SPECIAL AWARDS**

SHOWMANSHIP (4-H age 14 and over)	ROSETTE
JR. SHOWMANSHIP (4-H age 8-13)	ROSETTE
BEST OF BREED (One for each breed)	ROSETTE
BEST OPPOSITE SEX OF BREED (One for each breed)	ROSETTE
CHAMPION MEAT PEN	ROSETTE AND TROPHY
CHAMPION GRADE	ROSETTE AND TROPHY
CHAMPION COMMERCIAL	ROSETTE AND TROPHY
CHAMPION FANCY THREE	ROSETTE AND TROPHY
CHAMPION FANCY	ROSETTE AND TROPHY
CHAMPION WOOLY	ROSETTE AND TROPHY
GRAND CHAMPION #	ROSETTE AND TROPHY
RESERVE GRAND CHAMPION#	ROSETTE

**#Selected from Champion Fancy, Champion Wooly, and Champion Commercial.**

### CHECK-IN AND CONFERENCE JUDGING SCHEDULE

Jr. Superintendents will be required to check in from 12:30 - 1:00 p.m. on the day of their superintending role

<b>Date</b>	<b>Project Area</b>	<b>Check-in start</b>	<b>Check-in</b>	<b>Location</b>
April 6, 2019	Public Presentations	12:00 p.m.	12:30 p.m.	Kendall County Extension Office
July 22, 2019	Animal Science, Cloverbuds, Exploratory, Leadership, Photography, Theatre Arts, Veterinary Science, Video/Filmmaking, Visual Arts	1:00 p.m.	3:30 p.m.	DuPage County Fairgrounds
July 23, 2019	Aerospace, Bicycle, Civic Engagement, Clothing & Textiles, Shopping, College & Career Readiness, Communications, Consumer Ed., Crops, Electricity, Entomology (General & Beekeeping), Foods & Nutrition, Forestry, Geology; Geospatial, Health, Horticulture, Intercultural, Interior Design, Natural Resources; Plants & Soils, Robotics, Shooting Sports, Small Engines, Technologies, Tractor, Welding, Woodworking	1:00 p.m.	3:30 p.m.	DuPage County Fairgrounds

## AEROSPACE

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

### **\*Model Rocketry (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 (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**

#### **(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 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.

**\*Indicates class is eligible for State Fair**

### **Special Awards**

CHAMPION AEROSPACE (4-H age 8-12)	ROSETTE & TROPHY
RESERVE CHAMPION AEROSPACE (4-H age 8-12)	ROSETTE
CHAMPION AEROSPACE (4-H age 13-18)	ROSETTE & TROPHY
RESERVE CHAMPION AEROSPACE (4-H age 13-18)	ROSETTE

## ANIMAL SCIENCE

**Check-in Monday, July 22, 2018 from 1:00–3:30 p.m.; judging Monday, July 22 beginning at 1:00 p.m. (open to members in Beef, Cats, Dairy, Dogs, Goats, Horse & Pony, Poultry, Rabbits, Sheep, Small Pets, and Swine)**

**\*Animal Science:** Prepare a display focusing on any activity related to the animal science 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: (Open to 11- to 18-year-olds enrolled in any Animal 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.

**\*Indicates class is eligible for State Fair**

**\*Animal 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.

### Special Awards

CHAMPION ANIMAL SCIENCE	ROSETTE & TROPHY
CHAMPION ANIMAL SCIENCE	ROSETTE & TROPHY
RESERVE CHAMPION ANIMAL SCIENCE	ROSETTE
RESERVE CHAMPION ANIMAL SCIENCE	ROSETTE

## BICYCLE

**Check-in Tuesday, July 23, 2018 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**CLASS: Bicycle Level 1 (Bicycling for Fun) (not eligible for State Fair)** – Prepare a 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.

**CLASS: Bicycle Level 2 (Wheels in Motion) (not eligible for State Fair)** – Prepare a 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.

**Bicycle Ready4Life Challenge (Open to 11- to 18-year-olds enrolled in any Bicycle project) (not eligible for State Fair)**

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

**\*Bicycle Maker**

**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.

**Special Awards**

CHAMPION BICYCLE	ROSETTE & TROPHY
RESERVE CHAMPION BICYCLE	ROSETTE

**CIVIC ENGAGEMENT**

**Due to space restrictions, exhibits are limited to 2' 6" wide and 15" deep.**

**\*Civic Engagement 1:**

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:**

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:**

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:**

**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**

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

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

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

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

**Service Learning 1** (not eligible for state fair)

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

**Service Learning 2** (not eligible for state fair)

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

**Special Awards**

CHAMPION COMMUNITY & GLOBAL AWARENESS (Civic Engagement, Service Learning)	ROSETTE & TROPHY
RESERVE CHAMPION COMMUNITY & GLOBAL AWARENESS (Civic Engagement)	ROSETTE

## CLOTHING & TEXTILES

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

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 and exhibit in 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**

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

#### **Non-Sewn Exhibits** 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** 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** 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:**

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

**Non-Sewn Exhibits** 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** 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** 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:**

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

**Non-sewn Exhibits** 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** 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** 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.

## **SHOPPING**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

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:**

**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:**

**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**

**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.

### Special Awards

CHAMPION STEAM 1	ROSETTE & TROPHY
RESERVE CHAMPION STEAM 1	ROSETTE
CHAMPION STEAM 2	ROSETTE & TROPHY
RESERVE CHAMPION STEAM 2	ROSETTE
CHAMPION STEAM 3	ROSETTE & TROPHY
RESERVE CHAMPION STEAM 3	ROSETTE
CHAMPION SHOPPING BEGINNER 1	ROSETTE & TROPHY
RESERVE CHAMPION SHOPPING BEGINNER 1	ROSETTE
CHAMPION SHOPPING BEGINNER 2	ROSETTE & TROPHY
RESERVE CHAMPION SHOPPING BEGINNER 2	ROSETTE
CHAMPION SHOPPING BEGINNER 3	ROSETTE & TROPHY
RESERVE CHAMPION SHOPPING BEGINNER 3	ROSETTE

### CLOVERBUDS

**Check-in Monday, July 22, 2019 from 1:00–3:30 p.m.; judging Monday, July 22 beginning at 1:00 p.m.**

1. 4-H Cloverbud members should be prepared to discuss what they learned with the designated adult representative.
2. The 4-H Cloverbud Group contact leader may be present with the 4-H Cloverbud members. This is a non-competitive sharing experience.
3. 4-H Cloverbuds is a non-premium class. 4-H Cloverbud participation ribbons will be awarded to each member of the group present for sharing.
4. All 4-H Cloverbud displays will be released from the fairgrounds from 6:00 -7:00 p.m. on Sunday, July 28.
5. The 4-H Cloverbuds class is for youth ages 5-7 as of September 1, 2018, enrolled in a DuPage County 4-H Cloverbud Group. Enrollment in a 4-H Cloverbud group must be made on or before April 1, 2019, to be eligible to participate in this class. Members must be enrolled in a Cloverbud project.

Prepare a group display of one activity completed from any of the 4-H Cloverbud curriculums (i.e., Cloverbuds 1 or 2). A table area of approximately 2 ½' x 2 ½' will be available for display. All Cloverbud members are encouraged to be present at the time of sharing along with the group contact leader.

### COLLEGE & CAREER READINESS

**Check-in Tuesday, July 23, 2018 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

#### **\*Build Your Future:**

Develop a Career portfolio that 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 (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.

**\*Indicates class is eligible for State Fair**

**\*College & Career Maker**

**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.

**Special Awards**

CHAMPION COLLEGE & CAREER READINESS	ROSETTE & TROPHY
RESERVE CHAMPION COLLEGE & CAREER READINESS	ROSETTE

**COMMUNICATIONS**

**\*Communications 1**

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**

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**

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**

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**

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:**

**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**

**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.

**Special Awards**

CHAMPION PERSONAL DEVELOPMENT (Communications, Creative Writing, Journalism)	ROSETTE & TROPHY
RESERVE CHAMPION PERSONAL DEVELOPMENT (Communications, Creative Writing, Journalism)	ROSETTE



## **COMMUNICATIONS: PUBLIC PRESENTATIONS**

**Check-in Saturday, April 6, 2019 from 12:00–12:30 p.m.; judging Saturday, April 6 beginning at 12:00 p.m. Judging will take place at the Kendall County Extension Office in Yorkville.**

Enrollment in the Public Presentations project is required to participate in this section. No live animals are allowed in speeches. A state contest is held in June, and counties will receive instruction as to the number of participants allowed.

### **Declamation | Memorized | 4-8 minutes**

Declamation requires participants to select a speech that was delivered in public and perform an excerpt of that speech to an audience. Speeches are up to 8 minutes in length. As a result, participants typically shorten the text of the speech to meet time requirements. The event is not designed for participants to mimic the original author of the speech. Instead, speakers are to develop an oration that delivers the message of the author in an original and engaging manner. The speech is delivered from memory. A written transcript of the speech must be publicly available.

### **Original Oratory | Notecards allowed | 4-8 minutes**

Participants deliver a self-written, 4- to 8-minute speech on a topic of their choosing. Limited in their ability to quote words directly, Original Oratory competitors craft an argument using evidence, logic, and emotional appeals. Topics range widely, and may be informative or persuasive in nature.

### **Topical Response Speech | 4-8 minutes | Notecards allowed**

Impromptu is a public speaking event where participants choose from a statewide shortlist of topical prompts, and prepares a speech to respond to the prompt. Prompts are developed by the state 4-H office and may be in the form of a quote, historical event, popular culture icon, etc. The speech should make clear which topic prompt the speaker is responding.

### **Illustrated Speech | Notes allowed | 5-10 minutes**

Illustrated Speeches (with any type of visual aids) must be 5 to 10 minutes in length and done by an individual member. Visual aids may be two dimensional, three-dimensional or include audience participation as long as the illustrations and human participants do not make a sound during the speech.

### **Team Interpretation | Team of 2-3 | Memorized | 5-10 minutes**

Youth team up to deliver a performance of a published script from a play or film. Participants should choose and portray scenes and characters that allow them to show a range of emotions, and to interact with an imaginary object or environment. Participants should not use any form of props or costumes and are not allowed to touch their teammate during any portion of the presentation. Participants are encouraged to include an introduction that states the title, author, and introduces the scene about to be presented to create a context.

### **Short Program Oral Interpretation | Script required | 4-8 minutes**

Using selections from either Prose or Poetry, participants create a performance from 4 to 8 minutes. A manuscript is required and may be used as a prop within the performance if the performer maintains control of the manuscript at all times. Performances can also include an introduction written by the participant to contextualize the performance and state the title and the author of each selection.

### **Long Program Oral Interpretation | Script required | 5-10 minutes**

Using selections from Prose, Poetry, and Drama, participants create a 5- to 10-minute performance around a central theme. Program Oral Interpretation (POI) is designed to test a participant's ability to combine multiple types of literature into a single performance that makes topical sense. A script is required and may be used as a prop within the performance if the performer maintains control of the manuscript at all times. Performances can also include an introduction written by the participant to contextualize the performance and state the title and the author of each selection.

### **Special Awards**

CHAMPION FORMAL SPEECH	ROSETTE & TROPHY
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RESERVE CHAMPION FORMAL SPEECH	ROSETTE
CHAMPION ILLUSTRATED SPEECH	ROSETTE & TROPHY
RESERVE CHAMPION ILLUSTRATED SPEECH	ROSETTE
CHAMPION ORIGINAL WORKS SPEECH	ROSETTE & TROPHY
RESERVE CHAMPION ORIGINAL WORKS FORMAL SPEECH	ROSETTE
CHAMPION ORAL INTERPRETATION FORMAL SPEECH	ROSETTE & TROPHY
RESERVE CHAMPION ORAL INTERPRETATION SPEECH	ROSETTE

## COMPUTER SCIENCE

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

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:**

**(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:**

**(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:**

**(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: (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 programing 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 (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**

**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.

**Special Awards**

CHAMPION COMPUTER SCIENCE	ROSETTE & TROPHY
RESERVE CHAMPION COMPUTER SCIENCE	ROSETTE

**CONSUMER EDUCATION**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**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:**

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:**

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 (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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION CONSUMER EDUCATION	ROSETTE & TROPHY
RESERVE CHAMPION CONSUMER EDUCATION	ROSETTE



## CROPS

Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.

### \*Soybeans

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

### \*Corn:

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

### \*Small Grains

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.

### \*Crops Innovation Class

**(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 (Open to 11- to 19-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

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION CROPS	ROSETTE & TROPHY
RESERVE CHAMPION CROPS	ROSETTE

**ELECTRICITY**

**Check-in Tuesday, July 23, 2018 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 3:30 p.m.**

It is strongly suggested that members use recommended construction details including proper color coding provided by the Energy Education Council (EEC) that have been provided on the EEC 4-H website; <http://www.energyeducouncil.org/4-H.html>.

**\*Electricity 1**

(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**

(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**

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 (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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION ELECTRICITY	ROSETTE & TROPHY
RESERVE CHAMPION ELECTRICITY	ROSETTE

**ENTOMOLOGY GENERAL**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

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**

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**

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**

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, Other: (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: (Open to 11- to 18-year-olds enrolled in any Entomology project)**

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

**\*Entomology Maker (SF 50400)**

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

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

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

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

\*Indicates class is eligible for State Fair

**Special Awards**

CHAMPION ENTOMOLOGY GENERAL	ROSETTE & TROPHY
RESERVE CHAMPION ENTOMOLOGY GENERAL	ROSETTE

**ENTOMOLOGY BEEKEEPING**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 3:30 p.m.**

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**

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**

Exhibit one (1) of the following:

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

### **\*Beekeeping 3**

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

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

### **\*Entomology Beekeeping Ready4Life Challenge (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.

\*Indicates class is eligible for State Fair

#### Special Awards

CHAMPION ENTOMOLOGY BEEKEEPING	ROSETTE & TROPHY
RESERVE CHAMPION ENTOMOLOGY BEEKEEPING	ROSETTE

### EXPLORATORY

Check-in Monday, July 22, 2018 from 1:00–3:30 p.m.; judging Monday, July 22 beginning at 1:00 p.m.

#### EXPLORATORY (*Welcome to 4-H*)

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

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.

#### Special Awards

CHAMPION EXPLORATORY	ROSETTE & TROPHY
RESERVE CHAMPION EXPLORATORY	ROSETTE

### FOODS & NUTRITION

Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.

#### \*4-H Cooking 101

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

#### \*4-H Cooking 201

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

#### \*4-H Cooking 301

*Using the recipes included in the project manual, prepare an exhibit of 3 dinner rolls; **OR** loaf of yeast bread; **OR** 1 tea ring; **OR** 3 sweet rolls; **OR** one layer of a Rich White Cake or Rich Chocolate Cake, top side up (*without frosting*). If icing is used on the tea ring or sweet rolls, the recipe for the icing must also come from the book. The yeast bread/roll dough may be prepared in a bread making machine; however prepared mixes are not permitted. If you make changes to the recipe, bring*

a copy of the recipe with your changes. Display exhibit on a disposable plate or pie tin and place in a zip-sealing plastic bag. *In addition to your food exhibit*, complete one of the six experiments: *Experiment with Flour* p. 33-34, *Experiment with Kneading* p. 35-36, *Experiment with Yeast* p. 37-38 or 39, *Experiment with Butter* p. 62-63 or *Experiment with Cheese* p. 104-105. Bring a document with a printed picture of your experiment and the answers to the experiment questions to remain on display with your project.

#### **\*4-H Cooking 401**

*Using the recipes included in the project manual*, prepare an exhibit of  $\frac{1}{4}$  of a 15" x 10" loaf of focaccia bread (do not include dipping oil); **OR** one baked pie shell – traditional, oil, or whole wheat (no graham cracker); **OR**  $\frac{1}{4}$  Golden Sponge Cake, top side up, without frosting; **OR**  $\frac{1}{2}$  loaf French Bread. If you make changes to the recipe, bring a copy of the recipe with your changes. Display exhibit on a disposable plate and place in a zip-sealing plastic bag. *In addition to your food exhibit*, pick one of the recipes from Cooking 401 that is not a choice for exhibit. Make the recipe and take a picture of the results. Bring a document with a printed picture of the food you made from the recipe and the answers to the following two questions: 1.) If you made this recipe again, what would you do differently? 2.) What did you learn that can help you in other ways besides preparing food?

#### **\*Food Science 1**

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

#### **\*Food Science 2**

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

#### **\*Food Science 3**

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

#### **\*Food Science 4**

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

#### **\*Food Preservation**

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). 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:**

**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 (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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION FOODS (9)	ROSETTE & TROPHY
RESERVE CHAMPION FOODS (9)	ROSETTE

**FORESTRY**

**Check-in Tuesday, July 23, 2018 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**\*Forests of Fun 1**

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**

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**

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 (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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION FORESTRY	ROSETTE & TROPHY
RESERVE CHAMPION FORESTRY	ROSETTE

**GEOLOGY**

**Check-in Tuesday, July 23, 2018 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 3:30 p.m.**

**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**

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**

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**

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**

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 (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 (Open to 11- to 18-year-olds enrolled in the Geology project)**

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

### **\*Geology Maker (SF 50400)**

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

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

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

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

**\*Indicates class is eligible for State Fair**



### Special Awards

CHAMPION GEOLOGY	ROSETTE & TROPHY
RESERVE CHAMPION GEOLOGY	ROSETTE

## GEOSPATIAL

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m**

### Exploring Spaces, Going Places: Level 1 (not eligible for State Fair)

Exhibit one of the two options listed below:

- Using the ‘Take Me on a Tour ‘ activity, create a display and map showing four to six tour sites, geo-tools used to create the map, positional data for the sites, and information about the selected sites. **OR**
- Using information from the ‘‘What Are Geographical Tools?’’ activity, prepare an exhibit showing and describing ten mapping tools. Explain how the mapping tools are used and why maps are important.

### Exploring Spaces, Going Places: Level 2 (not eligible for State Fair)

Using the table from the ‘‘Take Me on a Tour’’ activity, create a map showing recreational, historical or public service sites in your community. Determine if there is a need for additional community resources. Make written suggestions for what resources should be added and where they should be located on your map.

### Exploring Spaces, Going Places: Level 3 (not eligible for State Fair)

Create a computer-generated map with layered data that provides information on a community need. Explain how the need was identified; how you gathered information; and your recommendations on how to solve the need. Use the template from ‘‘Take Me on a Tour’’ activity to gather data for the map.

### Geospatial Ready4Life Challenge (Open to 11- to 18-year-olds enrolled in the Geospatial project) (not eligible for State Fair)

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.

### \*Geospatial Maker

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION GEOSPATIAL	ROSETTE & TROPHY
RESERVE CHAMPION GEOSPATIAL	ROSETTE

**HEALTH**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**\*Health 1**

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 item is used for.

**\*Health 2**

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**

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 (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 (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**

**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.

\*Indicates class is eligible for State Fair

### Special Awards

CHAMPION HEALTH	ROSETTE & TROPHY
RESERVE CHAMPION HEALTH	ROSETTE

## HORTICULTURE: FLORICULTURE

Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.

### \*Floriculture A

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:

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

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

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

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

will not remain on display during the entire exhibit period.

**\*Floriculture Ready4Life Challenge (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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION FLORICULTURE (2)	ROSETTE & TROPHY
RESERVE CHAMPION FLORICULTURE (2)	ROSETTE

**HORTICULTURE: VEGETABLE GARDENING**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

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 (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 (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 DISPLAY/PLATE 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, butternut, 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 (Open to youth in Vegetable Gardening A, Vegetable Gardening B, Vegetable Gardening C, Vegetable Gardening D)

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

### \*Vegetable Gardening Ready4Life Challenge (Open to 11- to 18-year-olds enrolled in any Vegetable Gardening project)

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

### \*Vegetable Gardening Maker (SF 50400)

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

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

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

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

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

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION HORTICULTURE (2)	ROSETTE & TROPHY
RESERVE CHAMPION HORTICULTUE (2)	ROSETTE

**INTERCULTURAL**

**Check-in Tuesday, July 23, 2018 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**\*Passport to the World, Individual**

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**

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

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

**\*Intercultural Maker (SF 50400)**

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

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

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

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

**\*Intercultural, Club, Includes *Passport to the World, Diversity & Cultural Awareness, and Latino Cultural Arts Projects***

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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION INTERCULTURAL	ROSETTE & TROPHY
RESERVE CHAMPION INTERCULTURAL	ROSETTE

**INTERIOR DESIGN**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**\*Design Decisions, Beginning**

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**

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**

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 (Open to youth 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(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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION INTERIOR DESIGN	ROSETTE & TROPHY
RESERVE CHAMPION INTERIOR DESIGN	ROSETTE



## LEADERSHIP

**Check-in Monday, July 22, 2019 from 1:00–3:30 p.m.; judging Monday, July 22 beginning at 1:00 p.m.**

### **\*Leadership 1**

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**

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**

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 (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 (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**

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

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

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

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

**\*Leadership Group Exhibit (Open to clubs and groups whose members are enrolled in What’s Leadership?)**

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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION LEADERSHIP	ROSETTE & TROPHY
RESERVE CHAMPION LEADERSHIP	ROSETTE

**NATURAL RESOURCES**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

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

**\*Natural Resources 1:** Exhibit any item developed from the project book, *Step Into Nature*.

**\*Natural Resources 2:** Exhibit any item developed from the project book, *Explore the Natural World*.

**\*Natural Resources 3:** Exhibit any item developed from the project book, *Blaze the Trail*.

**\*Outdoor Adventures 1:** Exhibit a display illustrating an activity completed from the project manual.

**\*Outdoor Adventures 2:** Exhibit a display illustrating an activity completed from the project manual.

**\*Outdoor Adventures 3:** Exhibit a display illustrating an activity completed from the project manual.

**\*Sportsfishing 1**

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**

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**

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**

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

**\*Wildlife 2**

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:**

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

**\*Natural Resources/Sportsfishing/Wildlife Innovation Class (Open to youth enrolled in any Natural Resource Project.)**

Demonstrate the skills and knowledge you have gained through the project you have studied. **Your exhibit should not fit in the other exhibit options for this project.** This could be related to, but not limited to habitat construction, maintenance, water quality, fish biology, or involvement with citizen science efforts. 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.

**\*Natural Resources Ready4Life Challenge (Open to 11- to 18-year-olds enrolled in any Natural Resources 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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION NATURAL RESOURCES (2)	ROSETTE & TROPHY
RESERVE CHAMPION NATURAL RESOURCES (2)	ROSETTE

**PHOTOGRAPHY**

**Check-in Monday, July 22, 2019 from 1:00–3:30 p.m.; judging Monday, July 22 beginning at 1:00 p.m.**

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/membes/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:**

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

**\*Photography 2**

Exhibit one of the options listed below:

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

**\*Photography 3**

Exhibit one of the options listed below:

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

**\*Photo Editing (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 (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 (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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION PHOTOGRAPHY 1	ROSETTE & TROPHY
RESERVE CHAMPION PHOTOGRAPHY 1	ROSETTE
CHAMPION PHOTOGRAPHY 2	ROSETTE & TROPHY
RESERVE CHAMPION PHOTOGRAPHY 2	ROSETTE
CHAMPION PHOTOGRAPHY 3	ROSETTE & TROPHY
RESERVE CHAMPION PHOTOGRAPHY 3	ROSETTE
CHAMPION PHOTO EDITING	ROSETTE & TROPHY
RESERVE CHAMPION PHOTO EDITING	ROSETTE

**PLANTS & SOILS**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**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 (Open to 11- to 18-year-olds enrolled in any Plants & Soils project) (not eligible for State Fair)**

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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION PLANTS & SOILS	ROSETTE & TROPHY
RESERVE CHAMPION PLANTS & SOILS	ROSETTE

## ROBOTICS

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**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 & Intermediate) and Robotics 2 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 Free Range Robotics Class, Innovation Class, or Ready4Life Challenge 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**

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**

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:**

**Open to youth enrolled in Robotics 3, but may also include youth in Robotics 1 or 2 if the exhibit 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**

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**

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 (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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION ROBOTICS	ROSETTE & TROPHY
RESERVE CHAMPION ROBOTICS	ROSETTE

**SHOOTING SPORTS (not eligible for State Fair)**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**You must be enrolled in a Shooting Sports SPIN Club to participate in these exhibit classes.**

4-H members enrolled in 4-H Shooting Sports may choose to exhibit a display in addition to or instead of participating in a Shooting Sports Event. Members must be a member of an approved 4-H Shooting Sports Club to exhibit. No live ammunition, actual firearms or parts of a firearm that could be reassembled should be included. Any manufactured part of a sporting arm may not be displayed. Human Silhouette targets will not be displayed. All exhibits should be posters suitable for display to the general public. Exhibits deemed to be inappropriate will not be displayed.

**Shooting Sports: Air Rifle (not eligible for State Fair)**

Exhibit a poster 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: Hunting & Outdoor Skills (not eligible for State Fair)**

Exhibit a poster related to something you learned in the Hunting & Outdoor Skills project.

**Shooting Sports Ready4Life Challenge (Open to 11- to 18-year-olds enrolled in any Shooting Sports project) (not eligible for State Fair)**

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**

**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.

**Special Awards**

CHAMPION SHOOTING SPORTS	ROSETTE & TROPHY
RESERVE CHAMPION SHOOTING SPORTS	ROSETTE

**SMALL ENGINES**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 3:30 p.m.**

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**

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 (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.

**\*Indicates class is eligible for State Fair**

**\*Small Engines Maker**

**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.

**Special Awards**

CHAMPION SMALL ENGINES	ROSETTE & TROPHY
RESERVE CHAMPION SMALL ENGINES	ROSETTE

**TECHNOLOGIES**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 3:30 p.m.**

**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)**

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**

**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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION TECHNOLOGIES	ROSETTE & TROPHY
RESERVE CHAMPION TECHNOLOGIES	ROSETTE

**THEATRE ARTS**

**Check-in Monday, July 22 2019 from 1:00–3:30 p.m.; judging Monday, July 22 beginning at 1:00 p.m.**

**\*Theatre Arts 1**

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**

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 (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 (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)**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION THEATRE ARTS	ROSETTE & TROPHY
RESERVE CHAMPION THEATRE ARTS	ROSETTE

**TRACTOR**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**\*Tractor A**

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**

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**

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**

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 (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 (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**

**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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION TRACTOR	ROSETTE & TROPHY
RESERVE CHAMPION TRACTOR	ROSETTE

## VETERINARY SCIENCE

Check-in Monday, July 22, 2019 from 1:00–3:30 p.m.; judging Monday, July 22 beginning at 1:00 p.m.

### \*Veterinary Science (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 (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 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.

\*Indicates class is eligible for State Fair

### Special Awards

CHAMPION VETERINARY SCIENCE	ROSETTE & TROPHY
RESERVE CHAMPION VETERINARY SCIENCE	ROSETTE

## **VIDEO/FILMMAKING**

**Check-in Monday, July 22, 2019 from 1:00–3:00 p.m.; judging Monday, July 22 beginning at 1:00 p.m.**

Enrollment in the Video project is required to exhibit in the classes in this section. Entries in 360° video may be enrolled in video/film or computer science projects.

**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**

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**

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**

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**

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

### **\*Video/Filmmaking Innovation Class (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 (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)**

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.

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION VIDEO/FILMMAKING	ROSETTE & TROPHY
RESERVE CHAMPION VIDEO/FILMMAKING	ROSETTE

**VISUAL ARTS**

**Check-in Monday, July 22, 2019 from 1:00–3:30 p.m.; judging Monday, July 22 beginning at 1:00 p.m.**

(1 State Fair entry in each class of the following classes: Paper, Fiber, Fiber Arts Non-Original for 8-10-year-olds, Clay, Wood, Glass/Plastic, Metal, Nature, Computer-Generated Art, Three-Dimensional Design/Mixed Media, Heritage Arts, Scrapbooking, Food Decorating, and Chalk/Carbon/Pigment created on wood, metal, or textiles; 2 entries in Chalk/Carbon/Pigment created on canvas, paper, or glass. Each county may also submit one entry in the Visual Arts Ready4Life Challenge Class.

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**

**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**

**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**

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**

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 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**

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**

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**

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**

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

#### **\*Visual Arts Glass/Plastic**

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**

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 Metal**

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**

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**

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**

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**

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**

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**

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 **free-standing** (not meant to be hung) that is 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**

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 (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**

**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 Clay Molds (not eligible for State Fair)**

Kiln Fired – Cast Mold (precast greenware or bisqueware)

**Visual Arts Kits (not eligible for State Fair)**

Kits of models from any media shall be entered in this class. Kits are defined as any prepackaged item where the materials are predetermined by the manufacturer. (This would not include model aircraft or rockets, which should be exhibited in Aerospace.)

**\*Indicates class is eligible for State Fair**

**Special Awards**

CHAMPION VISUAL ARTS (16)	ROSETTE & TROPHY
RESERVE CHAMPION VISUAL ARTS (16)	ROSETTE

**WEATHER**

**\*Weather and Climate Science 1:**

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:**

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:**

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:**

**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**

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.

## WELDING

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**\*Welding**

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

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

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

**\*Welding Maker (SF 50400)**

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

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

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

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

\*Indicates class is eligible for State Fair

**Special Awards**

CHAMPION WELDING	ROSETTE & TROPHY
RESERVE CHAMPION WELDING	ROSETTE

**WOODWORKING**

**Check-in Tuesday, July 23, 2019 from 1:00–3:30 p.m.; judging Tuesday, July 23 beginning at 1:00 p.m.**

**\*Woodworking 1**

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**

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**

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**

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



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

**\*Woodworking Maker (SF 50400)**

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

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

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

**Special Awards**

CHAMPION WOODWORKING	ROSETTE & TROPHY
RESERVE CHAMPION WOODWORKING	ROSETTE