Ffa Agriculture Technology Rules.

1. Exhibits from individual students, groups, classes, or FFA chapters.
   A. Eligibility. Open to Minnesota students, grades 7-12, who are currently enrolled in an agricultural education program during the 2019-2020 school year, or who are active members of a FFA chapter in good standing with the state FFA association.
      1. FFA members enrolled in new or reestablished programs are not eligible to exhibit until the fair following the first academic year of operation.
      2. Exhibitors who have not graduated from high school must have been enrolled in at least one agriculture class during the current year.
      3. Must be current, paid members in good standing of the State FFA and National FFA.
      4. Exhibits must have been completed since the close of the 2019 Minnesota State Fair.

2. A committee will evaluate projects to determine if they are the type, kind and quality to be representative of agricultural technology.

3. Entries.
   A. All exhibits must be registered online; no unregistered exhibits will be accepted at the door. One entry per individual per class.
   B. Entries open May 4 through Aug. 14, 2020, 4:30 p.m.
   C. Entries must be made by the FFA advisor.

4. Exhibit delivery. Exhibits should be brought to the Agriculture-Horticulture Building on the delivery dates and times indicated.
   A. Delivery dates and times. Monday, Aug. 17, 2020 8 a.m. to 2 p.m. and Friday, Aug. 21, 2020 8 a.m. to noon.
      1. Exhibits to be brought to the Agriculture-Horticulture Building. Very large projects MUST be approved before registration; contact Joel Larsen at jmmbl@bevcomm.net for assistance.
      2. Please contact Joel Larsen if your county fair conflicts with delivery dates and times.
   B. Exhibits may not be dropped off at any other time, unless prior arrangements have been made for staff from FFA Agriculture Technology to be present to accept exhibits.
      1. Only FFA Agriculture Technology staff may accept FFA Agriculture Technology exhibits.

5. Identification.
   A. Exhibit tags. Will include the following information: Class description, student name, student grade and FFA chapter name.
      1. Tags will be mailed to the address of the advisor who registered the entries.

6. Judging. In classes where entries exceed 10, classes may be split at the discretion of the superintendent.
   A. After judging, entries will be selected for display.
   B. Points are calculated on: quality of workmanship, design, fabrication, finish and overall appearance, functionalism, selection of materials, and safety.

7. Removal of exhibits. Tuesday through Thursday, Sept. 8-10, 2020, from 10 a.m. to 6 p.m.
   A. Appointments for exhibit removal for dates/times other than above must be made by contacting the Competition Department at 651-288-4417.
Division A: Leadership

Leadership

1. **Exhibits.** Include education materials, science display or projects relating to Leadership, Power, Structures, and Electricity Systems; Natural Resource and Environmental Systems; Animal and Plant Sciences.
   
   A. Educational materials defined as projects or displays allowing individuals to read, learn, and understand a concept or standard.
      
      1. Term papers and reports are not included in educational materials.
   
   B. Must be student made, and reflecting an activity carried out in any agricultural mechanic subject area. May be the work of an individual student, or a group of two or more students.
   
   C. Working models, graphic, or three dimensional presentations.
   
   D. Exhibits should be mounted on plywood, masonite or other sturdy material for display.
   
   E. **Judging.**
      
      1. Basis for judging design and functionalism will be the effectiveness of the project or teaching aid in illustrating or clarifying a principle or idea.
      
      2. Special consideration given to workmanship and suitability for public display in judging.

Premiums for Leadership

Divisions A-F (except champions)

$13 $10 $8 $6 $3

Class Listing for Leadership

Leadership

1. Educational Materials, Individual, Grade 7-9
   
   *Displayed at the FFA Chapter House and Leadership Center.*

2. Educational Materials, Individual, Grade 10-12
   
   *Displayed at the FFA Chapter House and Leadership Center.*

3. Educational Materials, Group
   
   *Two or more individuals.*
   
   *Displayed at the FFA Chapter House and Leadership Center.*

15 Champion; Leadership
Division B: Power, Structures & Electricity Systems

Power, Structures and Electricity Systems

1. **Exhibits.** Include education materials, science display or science fair projects relating to Leadership, Power, Structures, and Electricity Systems; Natural Resource and Environmental Systems; Animal and Plant Sciences.
   A. Educational materials defined as projects or displays allowing individuals to read, learn, and understand a concept or standard.
   1. Term papers and reports are not included in educational materials.
   B. Must be student made, and reflecting an activity carried out in any agricultural mechanic subject area. May be the work of an individual student, or a group of two or more students.
   C. Working models, graphic, or three dimensional presentations.
   D. Exhibits should be mounted on plywood, masonite or other sturdy material for display.
   E. **Judging.**
      1. Basis for judging design and functionalism will be the effectiveness of the project or teaching aid in illustrating or clarifying a principle or idea.
      2. Special consideration given to workmanship and suitability for public display in judging.

Premiums for Power, Structures & Electricity Systems

Divisions A-F (except champions)

$13 $10 $8 $6 $3

Class Listing for Power, Structures & Electricity Systems

Power, Structures & Electricity Systems

1 Educational Materials, Individual, Grade 7-9
2 Educational Materials, Individual, Grade 10-12
3 Educational Materials, Group

Two or more individuals.

15 Champion; Power, Structures & Electricity Systems
Division C: Natural Resource & Envrmnt Sys

Natural Resource and Environmental Systems

1. **Exhibits.** Include education materials, science display or science fair projects relating to Leadership, Power, Structures, and Electricity Systems; Natural Resource and Environmental Systems; Animal and Plant Sciences.
   A. Educational materials defined as projects or displays allowing individuals to read, learn, and understand a concept or standard.
      1. Term papers and reports are not included in educational materials.
   B. Must be student made, and reflecting an activity carried out in any agricultural mechanic subject area. May be the work of an individual student, or a group of two or more students.
   C. Working models, graphic, or three dimensional presentations.
   D. Exhibits should be mounted on plywood, masonite or other sturdy material for display.
   E. **Judging.**
      1. Basis for judging design and functionalism will be the effectiveness of the project or teaching aid in illustrating or clarifying a principle or idea.
      2. Special consideration given to workmanship and suitability for public display in judging.

Premiums for Natural Resource & Envrmnt Sys

Divisions A-F (except champions)

| $13 | $10 | $8 | $6 | $3 |

Class Listing for Natural Resource & Envrmnt Sys

Natural Resource and Environmental Systems

1. Educational Materials, Individual, Grade 7-9
2. Educational Materials, Individual, Grade 10-12
3. Educational Materials, Group

   Two or more individuals.

15. Champion; Natural Resources and Environmental Systems
Division D: Animal Systems

Animal Sciences

1. **Exhibits.** Include education materials, science display or science fair projects relating to Leadership, Power, Structures, and Electricity Systems; Natural Resource and Environmental Systems; Animal and Plant Systems.
   A. Educational materials defined as projects or displays allowing individuals to read, learn, and understand a concept or standard.
      1. Term papers and reports are not included in educational materials.
   B. Must be student made, and reflecting an activity carried out in any agricultural mechanic subject area. May be the work of an individual student, or a group of two or more students.
   C. Working models, graphic, or three dimensional presentations.
   D. Exhibits should be mounted on plywood, masonite or other sturdy material for display.
   E. **Judging.**
      1. Basis for judging design and functionalism will be the effectiveness of the project or teaching aid in illustrating or clarifying a principle or idea.
      2. Special consideration given to workmanship and suitability for public display in judging.

Premiums for Animal Systems

Divisions A-F (except champions)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$15</td>
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<td>2</td>
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<td>4</td>
<td>$6</td>
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<td>5</td>
<td>$3</td>
</tr>
</tbody>
</table>

Class Listing for Animal Systems

Animal Sciences

1. Educational Materials, Individual, Grade 7-9
2. Educational Materials, Individual, Grade 10-12
3. Educational Materials, Group
   *Two or more individuals.*
15. Champion; Animal Systems
Division E: Plant Systems

Plant Sciences

1. **Exhibits.** Include education materials, science display or science fair projects relating to Leadership, Power, Structures, and Electricity Systems; Natural Resource and Environmental Systems; Animal and Plant Systems.
   
   A. Educational materials defined as projects or displays allowing individuals to read, learn, and understand a concept or standard.
      
      1. Term papers and reports are not included in educational materials.
   
   B. Must be student made, and reflecting an activity carried out in any agricultural mechanic subject area. May be the work of an individual student, or a group of two or more students.
   
   C. Working models, graphic, or three dimensional presentations.
   
   D. Exhibits should be mounted on plywood, masonite or other sturdy material for display.

   E. **Judging.**
      
      1. Basis for judging design and functionalism will be the effectiveness of the project or teaching aid in illustrating or clarifying a principle or idea.
      
      2. Special consideration given to workmanship and suitability for public display in judging.

**Premiums for Plant Systems**

Divisions A-F (except champions)

$13 $10 $8 $6 $3

**Class Listing for Plant Systems**

**Plant Sciences**

1. Educational Materials, Individual, Grade 7-9
2. Educational Materials, Individual, Grade 10-12
3. Educational Materials, Group
   
   *Two or more individuals.*

15. Champion; Plant Systems

20. Grand and Reserve Champion (divisions A-E)
Division F: Directed Activities

Directed Activities

1. **Exhibits.** Reflect introductory learning experiences, which develop skills that will be transferred to advanced project construction.
   
   A. Must be the work of an individual student.
   
   B. Must have an appropriate finish, and display quality workmanship.

Premiums for Directed Activities

Divisions A-F (except champions)

$13 $10 $8 $6 $3

Class Listing for Directed Activities

<table>
<thead>
<tr>
<th>Introductory Wood</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introductory wood project</td>
</tr>
<tr>
<td>2. Nesting box</td>
</tr>
<tr>
<td>3. Tool box</td>
</tr>
<tr>
<td>4. Bird House</td>
</tr>
<tr>
<td>5. Nail or tool carrier</td>
</tr>
<tr>
<td>6. Plant stand</td>
</tr>
<tr>
<td>7. Bird feeder</td>
</tr>
<tr>
<td>8. Wood shelf</td>
</tr>
<tr>
<td>9. Champion; Directed Activities, Introductory Wood</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intermediate Wood</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Sawhorse</td>
</tr>
<tr>
<td>11. Wood duck house</td>
</tr>
<tr>
<td>12. Feeder</td>
</tr>
<tr>
<td>13. House, other</td>
</tr>
<tr>
<td>14. Plant stand</td>
</tr>
<tr>
<td>15. Tray or folding table</td>
</tr>
<tr>
<td>16. Miscellaneous wood project</td>
</tr>
<tr>
<td>17. Lawn or garden furniture</td>
</tr>
<tr>
<td>18. Table</td>
</tr>
<tr>
<td>19. Finished furniture stand without drawer</td>
</tr>
<tr>
<td>20. Finished furniture table</td>
</tr>
<tr>
<td>21. Finished furniture stand with drawer</td>
</tr>
<tr>
<td>22. Champion; Directed Activities, Intermediate Wood</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Introductory Metal</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. Miscellaneous metal project</td>
</tr>
<tr>
<td>27. Laser design project</td>
</tr>
<tr>
<td>28. C-clamp</td>
</tr>
<tr>
<td>29. Hitch pins, chisels and punches</td>
</tr>
<tr>
<td>30. Eye bolt, nut and bolt</td>
</tr>
</tbody>
</table>

*Using tap and die.*
31 Sheet metal project
32 Drill bit gauge
33 Metal stand or chair
34 Metal tool box
35 Champion; Directed Activities, Introductory Metal

Intermediate Metal
45 Welded shop stand
46 Adjustable work stand
47 Safety stand
48 Implement ramps
49 Portable light extension cord
50 Shop stool or chair
51 Two-wheel utility cart
52 Shop or fence specialty puller
53 Garden arbor
54 Mail box or landscape post
55 Tool gauge
56 Tool box
57 Shop work bench
58 Fire pit / tools
59 Miscellaneous metal project
60 Metal display sign
61 Welded art
62 Champion; Directed Activities, Intermediate Metal

Natural Resources & Outdoor Environment Projects
70 Forestry and natural resources, metal
71 Forestry and natural resources, wood
72 Fishing rod
73 Ice fishing rod
74 Wildlife feeder
75 Antler mount
76 Tree stand
77 Gun rack/cabinet
78 Champion; Directed Activities, Natural Resources and Outdoor Environment Projects

Advanced Construction
80 Special wood project
   With agricultural application.
81 Special metal project
   With agricultural application.
82 Special concrete project
   With agricultural application.
83 Special electronics project
   *With agricultural application.*

84 Special hydraulics project
   *With agricultural application.*

85 Patio deck furniture, wood

86 Patio deck furniture, metal

87 Miscellaneous advanced project

88 Champion; Directed Activities, Advanced Construction

90 Grand and Reserve Champion (division F)
Division G: Large Construction Project

Large Construction Project

1. **Exhibits.** Entries in this division are projects too large or expensive to transport and display. No small projects.
   A. Exhibits will consist of plans, pictures, and an explanatory informational paragraph of the project.
   B. Exhibits should be mounted on tagboard for display.
   C. **Judging.** Judged on uniqueness of design, utility, and workmanship.

Premiums for Large Construction Project

Divisions G-I (except champions)

$30 $24 $20 $15 $10

Class Listing for Large Construction Project

<table>
<thead>
<tr>
<th>Large Construction Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Permanent agricultural building</td>
</tr>
<tr>
<td>2  Portable agricultural building</td>
</tr>
</tbody>
</table>
| 3  Large projects primarily of wood, wood planter box
  *Plans provided.*                                            |
| 4  Large projects primarily of metal, portable welding table
  *Plans provided.*                                             |
| 5  Large energy conservation project, portable light stand
  *Plans provided.*                                             |
| 6  Mechanization using sensing controls                         |
| 7  Champion; Large Construction Project                         |
Division H: Misc Ag & Home Equipment

Miscellaneous Agriculture and Home Equipment
1. Must be the work of an individual student.

Premiums for Misc Ag & Home Equipment
Divisions G-I (except champions)
$30 $24 $20 $15 $10

Class Listing for Misc Ag & Home Equipment

Miscellaneous Agricultural & Home Equipment Construction

1. Designed Adirondack wood chair
   Using Wood Craft Project plan 412186.

2. Designed welding table, individual
   Project plan available from superintendent Joel Larsen.

3. Designed welding table, team
   Project plan available from superintendent Joel Larsen.

4. Shop equipment
   examples: work benches, tool cabinets, etc.

5. Equipment, largely of wood
   examples: self feeders, holding pens, chutes

6. Equipment, largely of metal
   examples: gates, feed carts, post drivers.

7. Equipment, metal, recreational
   examples: patio, barbecue units, etc.

8. Wood splitting machine or tool
   May utilize a small gasoline engine or tractor as power source.

9. Hydraulic press

10. Motor stands

11. Work bench

12. Alternate energy related project

13. Engine hoist

14. Champion; Misc. Agricultural & Home Equipment
Major Agricultural Equipment

1. **Exhibits.** Must be able to pass through an eight foot door.
   A. **Restored tractors.** Must be unloaded. Displayed in Agriculture-Horticulture Building.

Premiums for Major Ag Equipment

Divisions G-I (except champions)

$30 $24 $20 $15 $10

Class Listing for Major Ag Equipment

1. Tandem wheel implement trailer
2. Two wheel trailer
   *Must include the running gear and box or rack.*
3. Carpentry
   *Construction largely of wood. Examples: wagon or trailer boxes, large feeders, farrowing crates, brooder houses, etc.*
4. Metal construction
   *Construction largely of metal. Examples: garden tractors, grain or bale elevators, livestock crate, etc.*
5. Large alternate energy project
6. Project utilizing hydraulic components
7. Tractor restoration, individual
8. Tractor restoration, chapter
9. Multipurpose application of sensing and automatic controls
10. Miscellaneous major agricultural equipment
11. Lawn sprayer

12. Champion; Major Agricultural Equipment
Fastenal Manufacturing and McNeilus Steel have teamed up again to sponsor the 2020 MN State FFA Welding Bench Contest!

Choose to enter as an individual for a chance to win a Lincoln MIG Welder, or enter your table as a team for a chance to win a new Welding helmet, Welding Coat, and Gloves for each participant in the team.

This contest combines being able to follow a laid out plan along with your own creativity and flair to culminate with a heavy duty, well-designed table that can be a center point of a home welding shop, the school Ag shop, or put it up for auction at an alumni or chapter fund-raiser.

SPONSORED BY

Fastenal Manufacturing

McNeilus Steel, Inc.