

DEPARTMENT 24

MECHANICAL PROJECTS

Superintendents: Brian Lerwick 920-344-7797; Diane Neff 920-887-8355

Entry Day: Tuesday of Fair Week – checked in by 7:00pm
*Class F – Scale Models/Farm Scenes/Miniatures MUST BE SETUP by 7:00pm

Judging Day: Thursday 9:00 am
*Class F – Scale Models/Farm Scenes/Miniatures **are judged on Entry Day** beginning at 10am and as soon as the exhibitor has completed assembling his/her exhibit

Judging Location: Youth Building

CLASS A - TRACTOR

-Open to youth enrolled in Tractor project or other youth groups doing equivalent work.

1. Mounted display with parts securely fastened, no larger than 3' by 4'
2. Poster (14"x22") or chart (14"x22") related to what youth has learned in Tractor Project
3. Any other item pertaining to your project

Premium – Face-to-Face Judging \$2.50 \$2.25 \$2.00 \$1.50

CLASS B - BICYCLE

-Open to youth enrolled in Bicycle project or other youth groups doing equivalent work.

1. Mounted display with parts securely fastened no larger than 3' by 4'
2. Poster (14"x22") or chart (14"x22") related to what youth has learned in Bicycle Project
3. Any other item pertaining to your project

Premium – Face-to-Face Judging \$2.50 \$2.25 \$2.00 \$1.50

CLASS C - SMALL ENGINES

-Open to youth enrolled in Small Engine Projects or other youth groups doing equivalent work.

1. **Unit 1 "Crank It Up"** Poster (14"x22") illustrating correct starting procedure for a small engine.
2. **Unit 2 "Warm It Up"** Poster (14"x22") showing correct steps in preparing a small engine for off season storage.
3. **Unit 3 "Tune It Up"** Poster (14"x22") showing correct steps in preparing a small engine for off season storage.
4. Any Other Poster (14"x22") pertaining to project or small engine safety.
5. Panel exhibit of small engine parts securely fastened with identification of parts. No larger than 3' by 4'
6. Panel exhibit of carburetor parts securely fastened with identification of parts. No larger than 3' by 4'
7. Panel exhibit of small engine electrical system parts securely fastened with explanation of function of parts. No larger than 3' by 4'.
8. Any other item pertaining to project.

Premium – Face-to-Face Judging \$2.50 \$2.25 \$2.00 \$1.50

CLASS D - GEOSPATIAL

-Open to youth enrolled in the Geospatial project.

1. Poster of Geographic tools (tape measure, GPS unit, maps, etc.) (14"x22")
2. Display of Geographic tools (tape measure, GPS unit, maps, etc.) (3 dimensional, not a poster)
3. Poster explaining a map (key, scale, etc.) (14"x22")
4. Display explaining a map (key, scale, etc.) (3 dimensional, not a poster)
5. A scrapbook of an activity/event using a GPS unit (a geocache search, hunting, trail walk, etc.)
6. A poster on any geospatial activity (14"x22")
7. Any other item pertaining to the geospatial project.

Premium - Face-to-Face Judging \$3.00 \$2.75 \$2.50 \$2.25

CLASS E - AEROSPACE

-Open to youth enrolled in Aerospace project or other youth groups doing equivalent work

-All rockets need engine lug in place, launch guide and recovery system

-No motors, launch equipment or igniters permitted

-All models should be painted

-NO LEGOs

-All entries [except #4, 5, 6 & 13] must have a 3x5 card attached explaining what you did.

-Except for #13, rockets should NOT have been fired

1. Small model of homemade airplane using balsa wood, paper, cardboard, etc., made to fly (**no kits allowed**)
2. Small model of airplane made from a kit, not made to fly
3. Small model of airplane made from a kit, made to fly
4. Poster (14"x22") pertaining to project
5. Display pertaining to project (*3 dimensional, not a poster*)
6. Any item made from 4-H Literature Aerospace Project Activity Guide for your project area.
7. Single stage rocket (*Grades 3-8*)
8. Single stage rocket (*Grade 9 & Up*)
9. Multi-stage rocket (**2 or 3 stage**) (*Grades 3-8*)
10. Multi-stage rocket (**2 or 3 stage**) (*Grade 9 & Up*)
11. Exotic design rocket, not made to fly
12. Exotic design rocket, made to fly
13. Rocket that has been fired (*include photo of launch, and report of distance, launch success/failure, accuracy, distance*)
14. Any other item pertaining to project.

Premium - Face-to-Face Judging \$2.50 \$2.25 \$2.00 \$1.75

CLASS F - SCALE MODELS/FARM SCENES & MINIATURES

-Open to youth enrolled in Scale Models Project.

-NO LEGOs.

-Displays can be **NO LARGER** than **46" wide x 48" deep**.

-Entries must all have 3x5 card attached explaining what you did.

-Exhibits will be judged on ENTRY DAY. Setup MUST be completed by 7:00pm.

1. **Booklet/Scrapbook** describing what was done/learned in project
2. **Poster** (14"x22") showing what was done/learned
3. **Miniature Farm Scenes** (*Grades 6 & under-First time entering this category at the fair*)
4. **Miniature Farm Scenes** (*Grades 6 & under-Entering this category for second or more times at fair. Include an explanation of new ideas, changes and/or improvements in your scene from previous years.*)
5. **Miniature Farm Scenes** (*Grades 7-9---First time entering this category at the fair*)
6. **Miniature Farm Scenes** (*Grades 7-9---Entering this category for second or more times at fair. Include an explanation of new ideas, changes and/or improvements in your scene from previous years.*)
7. **Miniature Farm Scenes** (*Grade 10 & up---First time entering this category at the fair.*)
8. **Miniature Farm Scenes** (*Grade 10 & up--Entering this category for second or more times at fair. Include an explanation of new ideas, changes and/or improvements in your scene from previous years.*)
9. **Any Other Scene - Purchased Materials** (*Grades 6 & under*)
10. **Any Other Scene - Purchased Materials** (*Grades 7-9*)
11. **Any Other Scene - Purchased Materials** (*Grades 10 & Up*)

12. **Any Other Scene - Handmade Materials** (Grades 6 & under)
 13. **Any Other Scene - Handmade Materials** (Grades 7-9)
 14. **Any Other Scene - Handmade Materials** (Grades 10 & Up)
 15. **Diorama Scene** (Size 12"x18"--NO LARGER!) (Grades 6 & Under)
 16. **Diorama Scene** (Size 12"x18"--NO LARGER!) (Grades 7-9)
 17. **Diorama Scene** (Size 12"x18"--NO LARGER!) (Grades 10 & Up)
 18. Any other item pertaining to project.
- Premium - Face-to-Face Judging \$2.50 \$2.25 \$2.00 \$1.75**

CLASS G - SINGLE MODEL

-Open to youth enrolled in Models Project.

-NO LEGOs.

-SINGLE MODEL of car, train car, animal, tractor, etc. NO Airplanes/Rockets (enter in Class E – Aerospace)

-ALL entries must have 3x5 card attached explaining what you did.

1. **Single Model** (Grades 6 & under)
2. **Single Model** (Grades 7-9) - **No snap-fit models allowed**
3. **Single Model** (Grades 10 & Up) - **No snap-fit models allowed**

Premium – Face to Face Judging \$2.50 \$2.25 \$2.00 \$1.75

CLASS H - LEGOs

Open to youth enrolled in LEGOs Project.

-If you will not be present during face-to-face judging, a 3x5 card must be attached, explaining how you came up with your design and what you did. Include information about the kit(s) used.

-All entries must be presented on a base no larger than 20"x20". Entries submitted *not on a base* will be automatically marked down one placing.

-Use the base to help tell the story of what the model is about. Base does not need to be from LEGO baseplates. Megabloks can also be used.

Grades 3-6

1. Model from a kit - judging will consider primarily how well the model is presented.
2. Original design - judging will consider the creativity in the original design and presentation.

Grades 7-9

3. Model from a kit - judging will consider primarily how well the model is presented.
4. Original design - judging will consider the creativity in the original design and presentation.

Grades 10 & Up

5. Model from a kit - judging will consider primarily how well the model is presented.
6. Original design - judging will consider the creativity in the original design and presentation.

Premium – Face to Face Judging \$2.50 \$2.25 \$2.00 \$1.75