

# DEPT. 24 - MECHANICAL SCIENCES

**Judging Day** - Monday of week preceding the fair

**Judging Location** - Youth Building

**Judging Time** - 2:00 p.m. to 7:00 p.m.

**Entry Limit** - Maximum of 4 exhibits per class and only one entry per lot

**Additional Rules of Entry**

- All posters must be 14" x 22".
- Scale models no larger than 3' x 3'.
- All components must be securely attached.

## CLASS A - MODEL AIRPLANES

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
1. Airplane made to fly, NO kit, wingspan: 20" or less	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
2. Airplane made to fly, NO kit, wingspan: over 20"	2.00	1.75	1.50	1.25
3. Airplane made to fly, from kit, wingspan: 20" or less	2.00	1.75	1.50	1.25
4. Airplane made to fly, from kit, wingspan: over 20"	2.00	1.75	1.50	1.25

## CLASS B - MODEL ROCKETRY

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
8. Single stage rocket	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
9. Multi-stage rocket	2.00	1.75	1.50	1.25
10. Exotic design rocket	2.00	1.75	1.50	1.25
11. Homemade design rocket	2.00	1.75	1.50	1.25
12. Poster on basic parts of a rocket	2.00	1.75	1.50	1.25
13. Scale Model Rocket	2.00	1.75	1.50	1.25

## CLASS C - AEROSPACE

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
15. Poster on basic parts of an airplane	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
16. Exhibit related to aerospace	2.00	1.75	1.50	1.25
17. Exhibit related to airplane or airplane pilots	2.00	1.75	1.50	1.25
18. Exhibit related to meteorology	2.00	1.75	1.50	1.25
19. Poster explaining real life experience of aerospace	2.00	1.75	1.50	1.25

## CLASS E - BICYCLE

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
20. An Educational display related to bicycles	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
21. Item relating to bicycling (riding pack, flat repair kit, etc.)	2.00	1.75	1.50	1.25
22. Story, poem or essay relating to bicycling	2.00	1.75	1.50	1.25
23. Scrapbook about bicycling	2.00	1.75	1.50	1.25

## CLASS F - LEGOS

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
24. Poster (14" x 22"), about the Lego Project	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
25. Lego display mounted on a base (landscape, village, scene, etc.) Maximum base size 24" x 24"	2.00	1.75	1.50	1.25
26. Free-standing Lego creation. No size limit	2.00	1.75	1.50	1.25
27. Lego display from a kit	2.00	1.75	1.50	1.25
28. Any other building material (not Legos) such as K'nex, Magnetix, Erector, or Gears	2.00	1.75	1.50	1.25

## CLASS G - SMALL ENGINES

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
30. Complete small engine, label all external parts	\$ 1.75	\$ 1.50	\$ 1.25	\$ 1.00
31. Complete small engine block with all internal parts separated, exposed and labeled (Panel exhibit)	1.75	1.50	1.25	1.00

32. Poster (14" x 22"), showing correct steps in preparing a small engine for off-season storage	1.75	1.50	1.25	1.00
33. Small engine safety poster (14" x 22") on: tiller, mini bike, go-cart, lawn mower, etc.	1.75	1.50	1.25	1.00
34. Poster (14" x 22"), listing preventive maintenance measures recommended for 2-cycle small engine	1.75	1.50	1.25	1.00
35. Any other exhibit related to small engines	1.75	1.50	1.25	1.00

### CLASS H - SCALE MODEL

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
40. Model car	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
41. Model truck	2.00	1.75	1.50	1.25
42. Model boat or ship	2.00	1.75	1.50	1.25
43. Model airplane	2.00	1.75	1.50	1.25
44. Model space ship, satellite	2.00	1.75	1.50	1.25
45. Model educational display: skeleton, etc	2.00	1.75	1.50	1.25
46. Model Farmstead, Business or other display	2.00	1.75	1.50	1.25

### CLASS I - TRACTORS

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
47. Poster or display showing safety procedures while using at least two types of farm equipment	\$ 2.50	\$ 2.25	\$ 2.00	\$ 1.75
48. Poster or display showing proper maintenance procedures of at least 2 types of farm equipment	2.50	2.25	2.00	1.75
49. Any other educational display	2.50	2.25	2.00	1.75

### CLASS J - OHV

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
52. Poster or display showing safety procedures to be observed while operating an Off Highway Vehicle	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
53. Any other poster or display regarding OHV	2.00	1.75	1.50	1.25

### CLASS K - COMPUTERS

#### Additional Rules of Entry

- All equipment necessary for displaying project or activity is exhibitor's responsibility. It is recommended to bring your own computer for judging. A laptop will be available, but you should double check its compatibility.
- Bring printed exhibit for display

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
60. Label exterior parts of computer	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
61. A multimedia presentation (minimum of 10 slides)	2.00	1.75	1.50	1.25
62. Educational poster or display	2.00	1.75	1.50	1.25
63. Create website and steps required in developing it	2.00	1.75	1.50	1.25
64. Create database and generate at least 3 reports or graphs from its data	2.00	1.75	1.50	1.25
65. Basic "How to..." poster, pamphlet or power point presentation	2.00	1.75	1.50	1.25

### CLASS L - ROBOTICS (& GEOSPATIAL)

<u>Lot No./Description</u>	<u>1<sup>st</sup></u>	<u>2<sup>nd</sup></u>	<u>3<sup>rd</sup></u>	<u>4<sup>th</sup></u>
70. Booklet describing what was done or learned in project	\$ 2.00	\$ 1.75	\$ 1.50	\$ 1.25
71. Poster (14" x 22"), showing what was done or learned in project	2.00	1.75	1.50	1.25
72. Display showing what was done or learned in project	2.00	1.75	1.50	1.25
73. Any other exhibit to show what was done or learned in project	2.00	1.75	1.50	1.25
74. Robot from a kit	2.00	1.75	1.50	1.25
75. Robot not from a kit	2.00	1.75	1.50	1.25