

JUNIOR DIVISION
Dept. 24 – Mechanical Science
Superintendent: Bill Vanevenhoven, 532-5550
4-H Project No.: 502, 503, 504, 521, 522, 551, 552, 553, 561, 571, 572, 573, 574

Entry Closing Date June 15th
Arrival Tuesday, 12:30 pm - 5:30 pm
Judging (Face-to-face) Tuesday, 1 pm - 6 pm
Release Sunday, 6 pm

RULES

1. Exhibitor must be enrolled in the Mechanical Science project or doing similar work in another youth organization to exhibit/show.
2. All articles must be the result of work this year.
3. All posters must be on 14" x 22" poster board.
4. Only one entry per lot number.

PREMIUMS	1st	2nd	3rd	4th
	2.00	1.75	1.50	1.25

CLASS A – AUTO MECHANICS

Lot No.

1. Exhibit on auto safety
2. Exhibit on auto maintenance
3. Exhibit on auto mechanics
4. Exhibit relating to buying a car
5. Any other exhibit not listed above

CLASS B – SMALL ENGINES UNIT 1

RULES

1. All projects are to be based on the four-cycle engine.

Lot No.

1. Panel exhibit on small engine parts with identification of parts (actual parts may be used)
2. Panel exhibit showing diagram of ignition system, fuel system or lubrication system (actual parts may be used)
3. Panel showing worn or faulty engine parts with a statement as to cause and prevention
4. Poster showing events in a four-cycle engine with brief explanation
5. Poster illustrating steps in small engine service job
6. Poster showing steps in small engine service for off season storage
7. Small engine safety poster
8. Complete small engine, labeling all external parts
9. Complete four-cycle engine block with all internal parts exposed and labeled (not a panel exhibit)
10. Model of a four-cycle engine
11. Any other exhibit not listed above

CLASS C – SMALL ENGINES, UNIT II

RULES

1. All projects are to be based on the two-cycle engine.

Lot No.

1. Poster showing events in a two-cycle engine with a brief explanation
2. Panel exhibit of carburetor parts with explanation of functions of parts; float type or diaphragm type
3. Poster listing preventative maintenance measures recommended for two-cycle engines
4. Safety poster on chain saw use, outboard motors, motorcycles or motor bikes
5. Model of a two-cycle engine
6. Any other exhibit not listed above

CLASS D– BICYCLE

Lot No.

1. Exhibit related to the parts of the bicycle
2. Exhibit on bicycle safety
3. Exhibit on bicycle care and maintenance
4. Any other exhibit not listed above

CLASS E – AEROSPACE

Lot No.

Unit I, Model Airplanes

1. Small model of homemade airplane (no kits) no larger than one foot in any direction
2. Airplane made from a kit, plastic
3. Airplane made from a kit, wood
4. Poster on basic parts of an airplane
5. Any other exhibit not listed above

Unit II, Model Rocketry

6. Single stage rocket
7. Multi-stage rocket
8. Homemade rocket
9. Poster on basic parts for rockets
10. Any other exhibit not listed above

Unit III, Flying

11. Poster on principle of flight
12. Poster on history of flight
13. Poster on structure and instruments
14. Poster on aircraft propulsion
15. Poster on air safety
16. Homemade kite
17. Kite from a kit
18. Any other exhibit not listed above

CLASS F – SNOWMOBILE PROJECT

Lot No.

1. Exhibit on snowmobile safety
2. Exhibit on snowmobile care and maintenance
3. Exhibit on snowmobile clothing
4. Exhibit on internal parts of snowmobile
5. Any other exhibit not listed above

CLASS G – SELF-DETERMINED MECHANICAL SCIENCE

Lot No.

1. Repaired, refinished, or constructed article for use in the workshop
2. Repaired, refinished, or constructed article for sport or recreational purposes
3. Repaired, refinished, or constructed article for use in the home
4. Repaired, refinished, or constructed article for use out of doors
5. Any other exhibit not listed above

CLASS H– TRACTORS/FARM EQUIPMENT

Lot No.

Tractor Safety

1. Detailed poster or display showing safety procedures to be observed while using at least 2 types of farm equipment
2. Detailed poster or display showing proper maintenance procedures of at least 2 types of farm equipment
3. Any other exhibit not listed above

CLASS I- MODELS

Items include scale models, miniatures, and any article that was constructed from a kit or made of original design to a scaled down size.

Lot No.

1. Model of collector's automobile (20 years and older)
2. Model of a truck or van
3. Model of standard automobile (20 years or younger)
4. Model of customized automobile
5. Model of any historic form of water transportation
6. Model of any contemporary form of water transportation
7. Radio controlled model
8. Display board of radio controlled car parts
9. Poster identifying parts of a radio controlled car
10. Scale model building, exterior
11. Scale model building or partial building, interior
12. Scale model building or partial building, interior with furniture
13. Drawing of an object to scale
14. Model of any other vehicle
15. Model of any historic event with or without people
16. Model of any other event with or without people
17. Model of animals alone or as part of a larger scene
18. Any other exhibit not listed above