

CLASS C. Woodworking (Grades 7 & 8)

- 1) Article for use in farm or home workshop
- 2) Article for use outdoors
- 3) Article for storage
- 4) Article for kitchen or living room
- 5) Article for use in home
- 6) Toy or homemade game
- 7) Creative article from wood or wood/other materials
- 8) Refinished article with explanation of steps used in refinishing
- 9) Article made in school
- 10) Poster of different types of wood clamps
- 11) Display on different wood fasteners

CLASS D. Woodworking (Grades 9+)

- 1) Article for use in farm or home workshop
- 2) Article for use outdoors
- 3) Article for use in storage
- 4) Furniture or cabinet making
- 5) Article for use in home
- 6) Creative article from wood or wood/other materials
- 7) Article made in school
- 8) Display of different adhesives
- 9) Display of different types of wood stains
- 10) Exhibit of different kinds of wood, properly identified, with explanation as to how and when used
- 11) Exhibit of wood joints and explanation of use
- 12) Exhibit of finishing materials, such as fillers, stains, varnishes, etc.
- 13) Repaired or refinished article, explanation of steps used
- 14) Poster of advanced woodworking tools

Special Awards and Sponsorships:

Miller & Sons Supermarket - All ribbons. Trophy to Champion and Rosette to Reserve Champion of designated classes.

ELECTRICITY Department 23

Check-In:

Tuesday, 1 - 8 p.m., Exhibition Hall

Judging:

Tuesday, 1 - 8 p.m. Individual Conference Judging, Exhibition Hall - in conjunction with Mechanical Projects

Department Chairperson: Mike Iselin - (608) 445-9367

Superintendents: Ron Rogers - (608) 886-2046

Eligible 4-H Project Areas: Electricity

Due to the unknowns associated with COVID-19, ALL information listed in the Dane County Fair Premium Book is subject to change at the Fair Board's discretion.

Regulations:

1. For safety reasons, please inspect your project at home before use at the Fair.
2. Electric plugs must be the "put together" type.

Premiums:

	<u>Blue</u>	<u>Red</u>	<u>White</u>	<u>Pink</u>
Class A	\$1.75	\$1.50	\$1.25	\$1
Class B	\$2	\$1.75	\$1.50	\$1.25
Class C	\$2.25	\$2	\$1.75	\$1.50
Class D	\$3	\$2.50	\$2	\$1.50

CLASS A. Magic of Electricity - Unit 1

- 1) Display of simple switch
- 2) Alternating current display
- 3) Electric question board
- 4) Steady hand tester
- 5) Simple electric attraction and repulsion exhibit
(Securely attach a 3"x5" card explaining how it works.)
- 6) Simple static electrical generator
(Securely attach a 3"x5" card explaining how it works.)
- 7) Display showing wiring in a simple circuit
- 8) Display showing closed/open circuits
- 9) Display on conductors
- 10) Display on magnetism
- 11) Display on electrical energy transferred into motion

CLASS B. Investigating Electricity - Unit 2

- 1) Homemade electric motor
- 2) Display showing a simple step-down transformer
(Securely attach a 3"x5" card explaining how it works.)
- 3) Display of a simple electromagnet
- 4) Simple homemade buzzer
- 5) Display showing circuit diagrams with explanation
- 6) Example of series circuit with explanation
- 7) Example of parallel circuit with explanation
- 8) Momentary Switch
- 9) Three Way Switch
- 10) Display showing a soldered connection
- 11) Rocket Launcher
- 12) Burglar Alarm

CLASS C. Wired for Power - Unit 3

- 1) Poster showing five types of lighting with a written explanation of how this is defined
- 2) Diagram or photographs of electrical improvements made at home
- 3) Wiring layout of your home or other building
- 4) Electrical Tool and Supply Kit
- 5) Display of symbols on wires and cables and their meanings
- 6) Constructed or repaired light - duty extension cord
(Attach a 3"x5" card explaining work performed.)

- 7) Constructed or repaired heavy - duty extension cord (Attach a 3"x5" card explaining work performed.)
- 8) Constructed or repaired lamp (Attach a 3"x5" card explaining work performed.)
- 9) Display showing how to replace a switch

CLASS D. World of Electronics - Unit 4

- 1) Display on Soldering Circuit Assembly
- 2) Display on Diodes
- 3) Display on voltage and polarity
- 4) "Blinky" Flasher
- 5) Alarm that activates in the presence of light
- 6) Light Meter
- 7) SCR Intruder Alarm
- 8) 6-8 Watt homemade amplifier with explanation
- 9) 14"x22" poster showing at least 12 common electric symbols

Special Awards and Sponsorships:

Miller & Sons Supermarket - Trophy to Champion and Rosette to Reserved Champion of the designated class.

**MECHANICAL PROJECTS
Department 24**

Check-In:

Classes A - I, K - N: Tuesday, 1 - 8 p.m., Exhibition Hall
Class J (Lego): Tuesday, 1 - 6 p.m., Exhibition Hall

Judging:

Classes A - I, K - N: Tuesday, 1 - 8 p.m. Individual Conference Judging, Exhibition Hall - in conjunction with Electricity Projects
Class J (Lego): Tuesday, 6 - 8 p.m., Exhibition Hall, Danish Judging

Department Chairperson: Mike Iselin - (608) 445-9367

Superintendents: Ron Rogers - (608) 886-2046

Eligible 4-H Project Areas: Rocketry, Bicycling, Engines, Tractors, Aerospace, Geospatial, Robotics, Legos, STEM

Due to the unknowns associated with COVID-19, ALL information listed in the Dane County Fair Premium Book is subject to change at the Fair Board's discretion.

Regulations:

1. Posters may not exceed 14"x22".
2. Display may not exceed 3'x3'.
3. Model airplanes and rockets must be made from scratch or kit. No snap together kits allowed. Project must be assembled and painted, ready for "show".
4. Rockets and powered airplanes must be painted and ready to fly. No rocket engines or radio control equipment may be exhibited.
5. Skill Levels: Must have level tag from the kit container as skill levels are determined by the level number on the kit.
6. Judge's decision is final.
7. Model airplane and model rocketry exhibitors are also encouraged to enter Class C.
8. Age categories for Junior and Senior Divisions are as follows: Junior - grades 3 - 7 and Senior - grades 8+.
9. All pre-painted, metal models must be entered in Class M, lots 13 or 30.
10. Legos: Any multi-section lego display must be mounted on a board or panel to allow the display to be moved for judging and display. Maximum size is 3' x 3'.

Premiums:

	<u>Blue</u>	<u>Red</u>	<u>White</u>	<u>Pink</u>
Class A-B, D-J, M-O	\$2	\$1.75	\$1.50	\$1.25
Class K-L	\$2.50	\$2.25	\$2	\$1.50
Class C	\$1.75	\$1.50	\$1.25	\$1

CLASS A. Model Airplanes

Junior Division Lots

- | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | Skill Level |
|-------------------------|----------|----------|----------|---|
| 1) | 2) | 3) | 4) | Rubber band powered model |
| 5) | 6) | 7) | 8) | Small model - under one foot in any direction |
| 9) | 10) | 11) | 12) | Airplane made from a plastic kit |
| 13) | 14) | 15) | 16) | Airplane made from a wood kit |
| (no skill level) | | | | |
| | | | 17) | 14"x22"poster on basic parts of an airplane |

Senior Division Lots

- | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | Skill Level: |
|-------------------------|----------|----------|----------|---|
| 18) | 19) | 20) | 21) | Rubber band powered model |
| 22) | 23) | 24) | 25) | Small model - under one foot in any direction |
| 26) | 27) | 28) | 29) | Airplane made from a plastic kit |
| 30) | 31) | 32) | 33) | Airplane made from a wood kit |
| (no skill level) | | | | |
| | | | 34) | 14"x22" poster on basic parts of an airplane |