

MINNESOTA STATE FAIR

Aug. 24-Sept. 4, 2023

K-12 Competition

Superintendent..... Chad Newton, Apple Valley, MN
Assistant Superintendent, Technology & Engineering Exhibits..... Jay Nix, Minneapolis, MN
Board Member..... Joe Fox, North St. Paul, MN

K-12 Competition Rules

1. **ENTRIES.** Opens Monday, May 1. Entries close for all K-12 exhibits Tuesday, Aug. 1, at 4:30 p.m. No exceptions.
 - A. **ONLINE REGISTRATION FOR INDIVIDUALS AND FAMILIES.** All entries MUST be registered. Entries close on Tuesday, Aug. 1, at 4:30 p.m. No entries will be accepted after closing date. No admission ticket required for drop off or return of exhibit.
 1. Refer to the "FAQ" link for detailed information and entry procedures for both individual exhibits and technology and engineering exhibits. Visit the Minnesota State Fair website at: mnstatefair.org/competitions/k-12-competition/ to begin the registration process.
 2. Entry forms and exhibit identification tags will be completed electronically and available when your article(s) are delivered.
 3. A confirmation will be sent to your email. Exhibitors must bring their registration confirmation during specified drop off dates and times for verification purposes only, a hard copy printed OR readily available to be viewed easily on a mobile device will be required at drop off.
 4. You must enter a description for each entry registered. It is extremely helpful during return of exhibits.
 - B. **ONLINE REGISTRATION FOR TEACHERS SUBMITTING MULTIPLE STUDENTS.** All entries MUST be registered. Entries close on Tuesday, Aug. 1, at 4:30 p.m. No entries will be accepted after closing date. No admission ticket required for drop off or return of exhibit.
 1. Refer to the "Entry Instructions" document for detailed information and entry procedures. Visit the Minnesota State Fair website at: mnstatefair.org/competitions/k-12-competition/ to begin the registration process.
 2. Exhibit identification tags will be completed electronically. For entries registered by a teacher, tags will be sent via USPS to the address provided during the registration process.
 3. Enter the name of your school carefully, use the school's full name, do not abbreviate. Information you submit during the registration process will be displayed on exhibit identification tags and in results posted online.
 4. When entering items made as a school project, teachers are only allowed to submit five (5) per class/grade.
 5. Complete registration by confirming registration for EACH student entered under your account, you will receive a separate email for each student and a list of their registered classes.
 - C. **MAIL-IN REGISTRATION.** All entries must be registered and in our hands (not postmarked) by Tuesday, Aug. 1, at 4:30 p.m. No entries will be accepted after closing date.
 1. On an 8 1/2" x 11" sheet of paper, include the students information: 1) first name, last name, address, and phone number; 2) list of class number(s) and a description of exhibit for each entry. Student name MUST be on project.
 2. Mail to: Competition Department - c/o: K-12 Competition, Minnesota State Fair, 1265 Snelling Ave. N., St. Paul, MN 55108.
 3. Paper confirmation of registered classes will be sent via USPS.
 - D. **THERE WILL BE NO REGISTRATION DURING DELIVERY DATES. NO WALK IN ENTRIES.** Exhibitors will NOT be allowed to walk-up with entries that have not been registered prior to delivery date.
2. **SPECIAL EDUCATION ENTRIES.** For students who are enrolled in Special Education classes and would like to be judged against like entries, please enter your items in the SE category.
 - A. **Online registration.** When entering exhibitor information, in the "School Information" section, choose "Yes" for "Special Ed". By doing so, the special education classes for the correct grade level will be available for registration.
 - B. **Mail-in registration.** Follow the directions below when listing the division and class numbers.
 1. **Individual Special Education Class 1__ SE__:** Use the same division letter and class number as the grade level. For example, a 7th grade special education student entering in Reports, would be listed as 1CSE731 on the identification tag.

2. **Technology and Engineering Special Education Class 2__ SE__**: Use the same division letter and class number as the grade level. For example, a 9th grade special education student entering in Electricity: wiring, would be listed as 2CSE16 on the identification tag.
3. **INDIVIDUAL EXHIBIT REQUIREMENTS.** Following rules apply ONLY to divisions: 1A-1D and 1ASE-1DSE. ALL photography and computer graphics projects in 4th grade and above must be entered in Technology and Engineering Exhibits.
 - A. **ELIGIBILITY.** Entries will be accepted from students of Minnesota schools in grades K-12. Grade classification is for year most recently completed. Children who have not yet completed Kindergarten are ineligible to exhibit. Special Education entries will be accepted from grades K-12.
 - B. **ENTRY LIMIT.** Entries are limited to one (1) item per student in any one class. Exception: Division D classes 1002-1018, 1026; 1102-1118, 1126; 1202-1218, 1226; where students may enter two (2) items. Items which do not fit categories will not be judged. Only one exhibitor number per student.
 - C. **JUDGING CRITERIA.** All work must be original and have been made within the past year. Entries will be judged on creativity, color, design, originality, quality and workmanship.
 - D. **TEACHERS** should act as first judge and enter only those that are worthy of the merit. No more than five (5) exhibits per grade/class from a teacher.
 - E. **ENTRY PREPARATION.**
 1. Items smaller than 5" x 7" should be suitably mounted to prevent loss (i.e. jewelry, small weavings).
 2. **Dioramas.** All items included in a diorama must be hand formed by the student or made of natural materials (rocks, branches, moss, shells, popsicle sticks, etc.) NO pre-fabricated items are allowed - i.e. Legos, Lincoln Logs, building blocks, figurines, beads, plastics or other pre-fabricated trees or plants, etc.
 3. **Food products are NOT allowed as part of any entry.**
 4. Submissions must be completed projects (i.e. paint must be dry, no missing parts).
 5. **All entries must be marked with grade just completed.**
 6. **Attaching tags:** when attaching tags to entries please use clear tape and attach to the upper right corner unless it covers a substantial amount of art work, then attach it to the upper left corner. DO NOT attach tags above, below, or to the side of frame or artwork.
 7. **Physical exhibit must be entered and delivered on time.** No photos, photocopies or computer generated copies are accepted as an exhibit for entry or display.
 8. **Written entries.** Writing entries in languages other than English are accepted, but must be accompanied by English translation of entry.
 9. **No entries accepted that require assembly of any kind.** Each entry must be pre-assembled and not need any additional assistance prior to judging or display.
 - F. **FRAMING.** Ensure hanging hardware is secure and strong enough to hold the frame. Framed pictures must have the necessary hardware: picture wire or hanger hardware attached so the artwork may be hung from a metal hook. NO TAPE ACCEPTED. **Picture hanging directions differ from Technology and Engineering Exhibits. Be sure to check appropriate directions for entry.
 1. Install hanger wire with proper orientation - horizontal vs. vertical according to the way the artwork is to be displayed.
 2. BACK of frame: Include students name, exhibitor number, class number and title of picture.
 3. Charcoal drawings should be submitted in a frame with a protective covering to prevent smudging.
 - G. **DESCRIPTIONS.** A brief description must be added during registration or during exhibit delivery for identification purposes. This is extremely helpful during exhibit return (i.e. clay turtle- green and pink shell).
 - H. **GROUP PROJECTS.** Must be entered under only ONE (1) name/exhibitor. Enter project in division of the highest grade level of members of group. Ex. 3rd and 4th grade group project must be entered under Division 1B class 439 (4th grade), with only ONE (1) exhibitor name.
 - I. **ACCEPTANCE OF EXHIBIT** does not ensure display of the exhibit due to limitation of space. All grand prize, first place, second place, third place and honorable mention items will be displayed.
 - J. **PREMIUMS and AWARDS.**
 1. **CLASS AWARDS.** First through third place in each class will receive ribbons. Honorable mention ribbons may be awarded at the judge's discretion. Judges reserve the right NOT to award all places in a class.
 2. **GRAND PRIZES.** Judges reserve the right to award a grand prize ribbon in any class with a particularly outstanding entry, with a maximum of two per grade. Written entries submitted in classes ending in 31, 32, 33, 34, 38 or 39 will be judged separately; needle/handcraft entries ending in 27, 28, 29 or 30 will be judged separately. Allowing for two (2) additional grand prize awards for written and needle/handcrafts.

4. **TECHNOLOGY AND ENGINEERING EXHIBITS REQUIREMENTS.** Following rules apply ONLY to divisions: 2A-2G and 2ASE-2GSE.
- A. **ELIGIBILITY.** Entries will be accepted from students in Technology and Engineering classes in any Minnesota school. Minnesota CTE high school students in Technology and Engineering classes and Trade and Industry classes may enter. Exception: photography (classes 8-13) DO NOT need to be enrolled in a technology education class to enter. No post high school students.
 - B. **ENTRY LIMIT.** Entries are limited to one (1) item per student in any one class. Acceptance of an exhibit does not ensure display of exhibit due to the limitation of space.
 - C. **JUDGING CRITERIA.** Competent, impartial judges will use the following general criteria for evaluating each entry.
 - 1. Simplicity - Simple and direct solution to a problem.
 - 2. Honesty - Utilizing the maximum characteristics of the materials.
 - 3. Originality - Creative and logical solution to a problem
 - 4. Workmanship - Obvious excellence at student's level.
 - 5. Function - Clearly defined usefulness.
 - 6. Structure - Reflects good engineering practices.
 - D. **TEACHERS** must act as the first judge and enter only those that are worthy of the merit. Instructors teaching multiple classes of the same subject matter may enter up to five items per division/class (i.e. teaching three 7th grade classes of Game Design could enter a total of 15 in that grade/class).
 - E. **ENTRY PREPARATION.** See category descriptions
 - 1. All items smaller than 5" x 7" should be suitably mounted to prevent loss.
 - 2. Fragile items should be protected by a display case or box.
 - 3. Metal items which may rust should be coated with oil or lacquer.
 - 4. **All digital artwork and graphic communication items must be mounted on poster board NO LARGER THAN 11" x 14".** Entry should consist of a single piece of work done by an individual student. Items which are printed on more than one side must be mounted to show all sides up. In addition to the mechanical perfection of a specimen, considerable thought should be given to its design, selection of materials, overall artistic effect to be obtained, and a suitability of specimen for intended purpose.
 - 5. **All entries must be marked with grade just completed.**
 - 6. **Attaching tags:** when attaching tags to exhibits please use clear tape and attach to the upper corners that cover the least amount of work.
 - F. **NO FRAMED PHOTOS/ARTWORK ACCEPTED.** Projects in classes 8-13 must be either 5" x 7", 8" x 10", or 11" x 14", and mounted securely on a piece of suitable mat board. NO LARGER than 11" x 14".
 - G. **IDENTIFICATION.** A strip of masking tape shall be placed securely and neatly on the item to be entered and shall be clearly identifiable, containing the following information: student name, school, teacher/instructor's name, grade and city.
 - H. **DESCRIPTIONS.** A brief description must be added during registration or during exhibit delivery for identification purposes. This is extremely helpful during exhibit return (i.e. photography - 5" x 7" deer in grass)
 - I. **GROUP PROJECTS.** Must be entered under only one (1) student's name/exhibitor. Choose which name to register the item under prior to registration. Solar boats and high mileage vehicles should be entered under class 28 - group projects. Robotics FIRST Robotics Competition (FRC) should be entered under class 30 or 31- group projects: FRC.
 - 1. Group projects should have a poster 2' x 3' that can be read from 10 feet away. Groups must submit documentation of how their project is engineered and all of its' functions to help with judging. Maximum three (3) pages. Exhibitors may be asked to participate in the parade during the State Fair. If you would like to participate, please talk to one of the staff when you bring in your vehicle.
 - J. **ACCEPTANCE OF EXHIBIT** does not ensure display of the exhibit due to limitation of space. All grand prize, first place, second place, third place and honorable mention exhibits will be displayed.
 - K. **PREMIUMS and AWARDS.**
 - 1. **CLASS AWARDS.** First through fifth place in each class will receive ribbons. Honorable mention ribbons may be awarded at the judge's discretion. Judges reserve the right NOT to award all places in a class.
 - 2. **SWEEPSTAKES.** Judges will award one (1) sweepstakes ribbon per division (A-G).

5. **ROBOTICS DEMONSTRATIONS.** If you enter in classes 18, 21, 30 or 31 in Technology and Engineering Exhibits and are interested in participating in the Robotics Demonstrations during the State Fair, please contact Jay Nix directly at 612-968-0802 as soon as possible. The demonstrations are scheduled each day of the State Fair at 10 a.m., noon and 3 p.m. Jay will schedule teams on a first come, first serve basis with 36 available slots. FRC teams should enter in class 30 or 31, not both. All other robotics, team or individual, should enter in class 18 or 21.
6. **DELIVERY OF EXHIBITS.** Entries in both Individual Exhibits and Technology and Engineering Exhibits will be accepted at the Education Building located at 1372 Cosgrove Street on Aug. 14 and 15, from 10 a.m. to 7 p.m.
 - A. All exhibits dropped off must have been registered through the online registration process by Aug. 1.
 - B. Please see the map available on the K-12 competition web page under general information for proper onsite entry procedure.
 - C. Exhibitors unable to bring exhibits to the Education Building during specified delivery dates and times may bring them to the competition office in the Admin Too Building, 1312 Cosgrove Street, Monday-Friday between 8 a.m. and 4:30 p.m., beginning July 17 through Aug. 1. No weekend deliveries and absolutely no exhibits will be accepted before July 17 due to limited space to store exhibits.
 - D. **DELIVERY BY MAIL.** Competitors who send exhibits by mail or express must send entries PRIOR to Aug. 1. Addressed to: Superintendent K-12 Competitions, Minnesota State Fair, 1265 Snelling Ave. N., St. Paul, MN 55108.
 1. The sender's name and address must be plainly written upon the outside of the package and also placed upon a card inside.
 2. A LIST OF EXHIBITS BEING SENT MUST BE ENCLOSED WITH ITEM DESCRIPTIONS.
 3. All express and parcel post charges must be prepaid by the sender. No P.O. Box addresses will be accepted. Directions for return shipment should be given and money or check (made out to Minnesota State Fair) must be enclosed to cover cost of returning entries to exhibitor. DO NOT SEND STAMPS.
7. **JUDGING.** A staff of competent judges will be selected for each competitive division. Decisions of the judges will be final. Judges are instructed not to award premiums unless articles are deemed worthy of merit. If no competition exists and an article is not worthy of a first premium, the judge may award a lesser premium or NO premium at all, according to his or her judgment. All announcements of winners will be made through the superintendent's office. The list of the names of winner in each class will also be available on the Minnesota State Fair website at mnstatefair.org as they become available beginning at 8 a.m. on the first day of the State Fair. Errors or omissions in results must be registered with the competition department within 10 days after the State Fair closes.
 - A. **TECHNOLOGY and ENGINEERING EXHIBITS.** All entries will be classified by the local authorized person, however the assistant superintendent reserves the right to reclassify any item in the best interest of the student. Each class that has over 10 entries will be subdivided into groups of 10 alphabetically by last name.
8. **RETURN OF EXHIBITS.** Wednesday, Sept. 6, and Thursday, Sept. 7, from 10 a.m. to 7 p.m.
 - A. No entries may be picked up prior to designated release dates and times.
 - B. **EXHIBITORS MUST PRESENT ENTRY FORM RECEIPTS FOR EXHIBITS.**
 - C. **NO EXHIBIT WILL BE RELEASED WITHOUT ENTRY FORM RECEIPT.** Photos on smart phone of receipt will be accepted.
 - D. Appointments for exhibit removal other than dates and times listed must be made through the competition department by calling 651-288-4417 after Sept. 8.
 - E. **All entries must be picked up by Dec. 1.** All entries must be picked up by, Friday, Dec. 1, at 4:30 p.m. AFTER such date, the State Fair reserves the right to destroy or dispose of non-claimed items at its discretion. Each person who enters an item at the State Fair does so on the condition and with the understanding that he or she forfeits any and all legal rights and claims to his or her entered items that is not picked up by the deadline described in this section.
9. **SPECIAL AWARDS - INDIVIDUAL EXHIBITS**
 - A. **COMPAS** - An organization that strengthens people and communities in Minnesota by engaging them in creating art, will award \$20 and a rosette for first prize and \$10 and a rosette for second prize to two (2) visual arts exhibitors from each of the following: Division 1A, 1B, 1C, 1D. Prize money will be awarded directly to the exhibitor from COMPAS.
10. **SPECIAL AWARDS - TECHNOLOGY and ENGINEERING EXHIBITS**

- A. **Minnesota Technology and Engineering Educators Association (MTEEA)** is offering a \$300 scholarship to any category that emphasizes technology in its presentation or creation. The winner of this scholarship will be awarded the grant after completing one quarter of post secondary education. To qualify for this award, the student's instructor must be a member of MTEEA.
- B. **Cummins Power Generation** will provide awards for the Minnesota State Fair robotics demonstrations.
- C. **Rockler Companies (Rockler Woodworking and Hardware) Scholarship Grant** is offering one \$400 scholarship for outstanding craftsmanship and technology presentation in any of the woodworking categories. These scholarships will be available to any junior or senior who intends to pursue a post high school education at any college, vocational or trade school.
- D. **CliftonLarsonAllen's Cap Wigington Architectural Design Award** CliftonLarsonAllen LLP will award a rosette and \$25 cash prize in honor of Minnesota architect Clarence W. "Cap" Wigington for best architectural drawing or model (structure of landscape) with special recognition for integration of environmental or energy conservation. Judge's choice for best entry from divisions 2E, 2F or 2G (classes 2, 3, and 25 combined). Prize money included in the Fair check.

Division 2A: Technology and Engineering Exhibits, Grades 4-6

Premiums for Technology and Engineering Exhibits, Grades 4-6

Technology Education Sweepstakes

\$25

Class Listing for Technology and Engineering Exhibits, Grades 4-6

Grades 4-6

- 4 Computer graphics: composite and collage
- 5 Computer graphics: original art/illustration/design
- 8 Photography-people/portrait: black and white or color
- 9 Photography-animal: black and white or color
- 10 Photography-nature and outdoors: black and white or color
- 11 Photography-landscape/cityscape: black and white or color
- 12 Photography-altered/experimental: black and white or color
- 13 Photography-journalism/social media: black and white or color
- 19 General plastics: clocks and other
- 23 Woodworking: small furniture
- 24 Woodworking: not furniture
- 25 Individual project: anything interesting or creative in tech ed
- 26 Cars: CO2 or compressed air
- 27 Rocketry and flight
- 29 Group project: anything interesting or creative in tech ed
Must submit a poster 2' x 3' that can be read from 10 feet away with documentation and an explanation of their project.
- 40 Sweepstakes, Technology Education

Division 2B: Technology and Engineering Exhibits, Grade 7

Premiums for Technology and Engineering Exhibits, Grade 7

Technology Education Sweepstakes

\$25

Class Listing for Technology and Engineering Exhibits, Grade 7

Grade 7

- 1 Engineering/mechanical drafting: hand or CAD
 - 2 Architectural: hand or CAD/Architectural models
 - 3 Engineering/3D Modeling: printed model with plans
 - 4 Computer graphics: composite and collage
 - 5 Computer graphics: original art/illustrated design
 - 8 Photography-people/portrait: black and white or color
 - 9 Photography-animal: black and white or color
 - 10 Photography-nature and outdoors: black and white or color
 - 11 Photography-landscape/cityscape: black and white or color
 - 12 Photography-altered/experimental: black and white or color
 - 13 Photography-journalism/social media: black and white or color
 - 14 Screen printing/sublimation: one color
 - 15 Screen printing/sublimation: multi-color
 - 16 Electricity: wiring, electronic buzzers, ringers, small robots (no legos)
 - 17 Automotive: small gas engines
 - 18 Robotics: electronics
 - 19 General plastics: clocks and other
 - 20 General metals: sheet/machining/welding
 - 21 Robotics: engineering/construction
 - 22 Woodworking: large furniture
 - 23 Woodworking: small furniture
 - 24 Woodworking: not furniture
 - 25 Individual project: anything interesting or creative in tech ed
 - 26 Cars: CO2 or compressed air
 - 27 Rocketry and flight
 - 28 Group project: solar boat/supermileage
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 29 Group project: anything interesting or creative in tech ed
Must submit a poster 2' x 3' that can be read from 10 feet away with documentation and an explanation of their project.
 - 30 Group project: FRC robotics electrical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 31 Group project: FRC robotics mechanical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
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- 40 Sweepstakes, Technology Education (classes 1-27)
 - 41 Sweepstakes, Group projects (classes 28-29)
 - 42 Sweepstakes, Group projects FRC robotics (classes 30-31)

Division 2C: Technology and Engineering Exhibits, Grade 8

Premiums for Technology and Engineering Exhibits, Grade 8

Technology Education Sweepstakes

\$25

Class Listing for Technology and Engineering Exhibits, Grade 8

Grade 8

- 1 Engineering/mechanical drafting: hand or CAD
 - 2 Architectural: hand or CAD/Architectural models
 - 3 Engineering/3D Modeling: printed model with plans
 - 4 Computer graphics: composite and collage
 - 5 Computer graphics: original art/illustrated design
 - 8 Photography-people/portrait: black and white or color
 - 9 Photography-animal: black and white or color
 - 10 Photography-nature and outdoors: black and white or color
 - 11 Photography-landscape/cityscape: black and white or color
 - 12 Photography-altered/experimental: black and white or color
 - 13 Photography-journalism/social media: black and white or color
 - 14 Screen printing/sublimation: one color
 - 15 Screen printing/sublimation: multi-color
 - 16 Electricity: wiring, electronic buzzers, ringers, small robots (no legos)
 - 17 Automotive: small gas engines
 - 18 Robotics: electronics
 - 19 General plastics: clocks and other
 - 20 General metals: sheet/machining/welding
 - 21 Robotics: engineering/construction
 - 22 Woodworking: large furniture
 - 23 Woodworking: small furniture
 - 24 Woodworking: not furniture
 - 25 Individual project: anything interesting or creative in tech ed
 - 26 Cars: CO2 or compressed air
 - 27 Rocketry and flight
 - 28 Group project: solar boat/supermileage
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 29 Group project: anything interesting or creative in tech ed
Must submit a poster 2' x 3' that can be read from 10 feet away with documentation and an explanation of their project.
 - 30 Group project: FRC robotics electrical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 31 Group project: FRC robotics mechanical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
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- 40 Sweepstakes, Technology Education (classes 1-27)
 - 41 Sweepstakes, Group projects (classes 28-29)
 - 42 Sweepstakes, Group projects FRC robotics (classes 30-31)

Division 2D: Technology and Engineering Exhibits, Grade 9

Premiums for Technology and Engineering Exhibits, Grade 9

Technology Education Sweepstakes

\$25

Class Listing for Technology and Engineering Exhibits, Grade 9

Grade 9

- 1 Engineering/mechanical drafting: hand or CAD
 - 2 Architectural: hand or CAD/Architectural models
 - 3 Engineering/3D Modeling: printed model with plans
 - 4 Computer graphics: composite and collage
 - 5 Computer graphics: original art/illustrated design
 - 8 Photography-people/portrait: black and white or color
 - 9 Photography-animal: black and white or color
 - 10 Photography-nature and outdoors: black and white or color
 - 11 Photography-landscape/cityscape: black and white or color
 - 12 Photography-altered/experimental: black and white or color
 - 13 Photography-journalism/social media: black and white or color
 - 14 Screen printing/sublimation: one color
 - 15 Screen printing/sublimation: multi-color
 - 16 Electricity: wiring, electronic buzzers, ringers, small robots (no legos)
 - 17 Automotive: small gas engines
 - 18 Robotics: electronics
 - 19 General plastics: clocks and other
 - 20 General metals: sheet/machining/welding
 - 21 Robotics: engineering/construction
 - 22 Woodworking: large furniture
 - 23 Woodworking: small furniture
 - 24 Woodworking: not furniture
 - 25 Individual project: anything interesting or creative in tech ed
 - 26 Cars: CO2 or compressed air
 - 27 Rocketry and flight
 - 28 Group project: solar boat/supermileage
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 29 Group project: anything interesting or creative in tech ed
Must submit a poster 2' x 3' that can be read from 10 feet away with documentation and an explanation of their project.
 - 30 Group project: FRC robotics electrical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 31 Group project: FRC robotics mechanical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
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- 40 Sweepstakes, Technology Education (classes 1-27)
 - 41 Sweepstakes, Group project (classes 28-29)
 - 42 Sweepstakes, Group project FRC robotics (classes 30-31)

Division 2E: Technology and Engineering Exhibits, Grade 10

Premiums for Technology and Engineering Exhibits, Grade 10

Technology Education Sweepstakes

\$25

Class Listing for Technology and Engineering Exhibits, Grade 10

Grade 10

- 1 Engineering/mechanical drafting: hand or CAD
 - 2 Architectural: hand or CAD/Architectural models
 - 3 Engineering/3D Modeling: printed model with plans
 - 4 Computer graphics: composite and collage
 - 5 Computer graphics: original art/illustrated design
 - 8 Photography-people/portrait: black and white or color
 - 9 Photography-animal: black and white or color
 - 10 Photography-nature and outdoors: black and white or color
 - 11 Photography-landscape/cityscape: black and white or color
 - 12 Photography-altered/experimental: black and white or color
 - 13 Photography-journalism/social media: black and white or color
 - 14 Screen printing/sublimation: one color
 - 15 Screen printing/sublimation: multi-color
 - 16 Electricity: wiring, electronic buzzers, ringers, small robots (no legos)
 - 17 Automotive: small gas engines
 - 18 Robotics: electronics
 - 19 General plastics: clocks and other
 - 20 General metals: sheet/machining/welding
 - 21 Robotics: engineering/construction
 - 22 Woodworking: large furniture
 - 23 Woodworking: small furniture
 - 24 Woodworking: not furniture
 - 25 Individual project: anything interesting or creative in tech ed
 - 26 Cars: CO2 or compressed air
 - 27 Rocketry and flight
 - 28 Group project: solar boat/supermileage
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 29 Group project: anything interesting or creative in tech ed
Must submit a poster 2' x 3' that can be read from 10 feet away with documentation and an explanation of their project.
 - 30 Group project: FRC robotics electrical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 31 Group project: FRC robotics mechanical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
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- 40 Sweepstakes, Technology Education (classes 1-27)
 - 41 Sweepstakes, Group projects (classes 28-29)
 - 42 Sweepstakes, Group projects FRC robotics (classes 30-31)

Division 2F: Technology and Engineering Exhibits, Grade 11

Premiums for Technology and Engineering Exhibits, Grade 11

Technology Education Sweepstakes

\$25

Class Listing for Technology and Engineering Exhibits, Grade 11

Grade 11

- 1 Engineering/mechanical drafting: hand or CAD
 - 2 Architectural: hand or CAD/Architectural models
 - 3 Engineering/3D Modeling: printed model with plans
 - 4 Computer graphics: composite and collage
 - 5 Computer graphics: original art/illustrated design
 - 8 Photography-people/portrait: black and white or color
 - 9 Photography-animal: black and white or color
 - 10 Photography-nature and outdoors: black and white or color
 - 11 Photography-landscape/cityscape: black and white or color
 - 12 Photography-altered/experimental: black and white or color
 - 13 Photography-journalism/social media: black and white or color
 - 14 Screen printing/sublimation: one color
 - 15 Screen printing/sublimation: multi-color
 - 16 Electricity: wiring, electronic buzzers, ringers, small robots (no legos)
 - 17 Automotive: small gas engines
 - 18 Robotics: electronics
 - 19 General plastics: clocks and other
 - 20 General metals: sheet/machining/welding
 - 21 Robotics: engineering/construction
 - 22 Woodworking: large furniture
 - 23 Woodworking: small furniture
 - 24 Woodworking: not furniture
 - 25 Individual project: anything interesting or creative in tech ed
 - 26 Cars: CO2 or compressed air
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 - 28 Group project: solar boat/supermileage
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 29 Group project: anything interesting or creative in tech ed
Must submit a poster 2' x 3' that can be read from 10 feet away with documentation and an explanation of their project.
 - 30 Group project: FRC robotics electrical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 31 Group project: FRC robotics mechanical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
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- 40 Sweepstakes, Technology Education (classes 1-27)
 - 41 Sweepstakes, Group projects (classes 28-29)
 - 42 Sweepstakes, Group projects FRC robotics (classes 30-31)

Division 2G: Technology and Engineering Exhibits, Grade 12

Premiums for Technology and Engineering Exhibits, Grade 12

Technology Education Sweepstakes

\$25

Class Listing for Technology and Engineering Exhibits, Grade 12

Grade 12

- 1 Engineering/mechanical drafting: hand or CAD
 - 2 Architectural: hand or CAD/Architectural models
 - 3 Engineering/3D Modeling: printed model with plans
 - 4 Computer graphics: composite and collage
 - 5 Computer graphics: original art/illustrated design
 - 8 Photography-people/portrait: black and white or color
 - 9 Photography-animal: black and white or color
 - 10 Photography-nature and outdoors: black and white or color
 - 11 Photography-landscape/cityscape: black and white or color
 - 12 Photography-altered/experimental: black and white or color
 - 13 Photography-journalism/social media: black and white or color
 - 14 Screen printing/sublimation: one color
 - 15 Screen printing/sublimation: multi-color
 - 16 Electricity: wiring, electronic buzzers, ringers, small robots (no legos)
 - 17 Automotive: small gas engines
 - 18 Robotics: electronics
 - 19 General plastics: clocks and other
 - 20 General metals: sheet/machining/welding
 - 21 Robotics: engineering/construction
 - 22 Woodworking: large furniture
 - 23 Woodworking: small furniture
 - 24 Woodworking: not furniture
 - 25 Individual project: anything interesting or creative in tech ed
 - 26 Cars: CO2 or compressed air
 - 27 Rocketry and flight
 - 28 Group project: solar boat/supermileage
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 29 Group project: anything interesting or creative in tech ed
Must submit a poster 2' x 3' that can be read from 10 feet away with documentation and an explanation of their project.
 - 30 Group project: FRC robotics electrical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
 - 31 Group project: FRC robotics mechanical
Must submit a poster 2' x 3' that can be read from 10 feet away and documentation of how their project is engineered and all of its functions.
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- 40 Sweepstakes, Technology Education (classes 1-27)
 - 41 Sweepstakes, Group projects (classes 28-29)
 - 42 Sweepstakes, Group projects FRC robotics (classes 30-31)