MINNESOTA STATE FAIR

Aug. 22-Sept. 2, 2024

K-12 Competition

Superintendent... **Chad Newton, Apple Valley, MN**

Assistant Superintendent, Technology & Engineering Exhibits... **Jay Nix, Minneapolis, MN**

Board Member, Vice President 5th District... **Sara Donaldson, Minneapolis, MN**

K-12 Competition Rules

1. **ENTRIES.** Opens Monday, May 6. Entries close for all K-12 exhibits Tuesday, July 30, at 4:30 p.m. No exceptions.
    A. **ONLINE REGISTRATION FOR INDIVIDUALS AND FAMILIES.** All entries MUST be registered. Entries close on Tuesday, July 30, at 4:30 p.m. No entries will be accepted after closing date. No fair 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. To begin the registration process, visit the Minnesota State Fair website mnstatefair.org/competitions/k-12-competition/
        2. Entry forms and identification tags will be completed electronically and available for when you deliver your exhibit(s).
        3. You will receive an instantaneous email confirmation after competing the online process. Exhibitors must have a copy printed out or readily available to view on a mobile device during specified drop-off dates as proof of your registration; when delivering your exhibits.
        4. You must enter a description for each exhibit 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, July 30, at 4:30 p.m. No entries will be accepted after closing date. No fair admission ticket required for drop off or return of exhibit.
        1. Refer to the "Entry Instructions" document for detailed information and entry procedures. To begin the registration process, visit the Minnesota State Fair website mnstatefair.org/competitions/k-12-competition/
        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 entries and corresponding class numbers.
    C. **MAIL-IN REGISTRATION.** All entries must be registered and in our hands (not postmarked) by Tuesday, July 30, 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 student's information: 1) first name, last name, address and phone number; 2) list entries including exhibit 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 exhibits will be sent via USPS. Entry forms and identification tags will be available for when you deliver your exhibit(s).
    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 with 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 exhibit classes for the correct grade level will be available for registration.
    B. **Mail-in registration.** Follow the directions below when listing the division and exhibit class numbers.

1. **Individual Special Education** Class 1__ SE___: Use the same division letter and exhibit 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 exhibit 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.** The 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 student-age exhibitors and residents of Minnesota, grades K-12. Grade classification is for the year most recently completed as of June 2024. Children who have not yet completed kindergarten are ineligible to exhibit. Special education entries will be accepted from grades K-12. Exhibits do NOT have to be created in school or during school hours.
   B. **ENTRY LIMIT.** Entries are limited to one (1) exhibit per student in any one class. Exception: Students may enter two (2) exhibits in Division D classes 1002-1018, 1026; 1102-1118, 1126; 1202-1218, 1226. Exhibits that do not fit within designated exhibit classes will not be judged. Each student is assigned one exhibitor number that applies too all of their entries, duplicate entries will be combined.
   C. **JUDGING CRITERIA.** All work must be original and have been made within the past year. Exhibits 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 (e.g., 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 prefabricated items are allowed - e.g., Lego®, 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 completed as of June 2024.**
      6. **Attaching exhibit identification tags:** When attaching tags to exhibits, please use clear tape and attach only 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 judging 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 for 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 student's 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 (e.g. 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 exhibit 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. This allows for two (2) additional grand prize awards for written and needle/handcrafts.

4. **TECHNOLOGY AND ENGINEERING EXHIBITS REQUIREMENTS.** The 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: Exhibits entered in photography 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) exhibit 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 (e.g. 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 that 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 that 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 completed as of June 2024.**
      6. **Attaching exhibit identification 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.** Exhibits entered 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. Exhibits can be NO LARGER than 11" x 14".
   G. **IDENTIFICATION.** A strip of masking tape must be placed securely and neatly on the item to be entered and must contain the following clearly identifiable 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 (e.g. 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 exhibit under prior to registration. Solar boats and high-mileage vehicles should be entered under class 28 - group projects.
      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 of three (3) pages.
   J. **ROBOTICS.** Robotics 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 exhibit.

    1. Robotics FIRST Robotics Competition (FRC) should enter in exhibit class 30 or 31 - Group project: FRC robotics electrical or mechanical, not both.

    2. All other robotics, team or individual, should enter in exhibit class 18 or 27.

  K. **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.

  L. **PREMIUMS and AWARDS.**

    1. **CLASS AWARDS.** First through fifth place in each exhibit 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 exhibit classes 18, 27, 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 jay.nix006@gmail.com 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.

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 St. on Aug. 12 and 13, from 10 a.m. to 7 p.m.

  A. All exhibits dropped off must have been registered through the online registration process by July 30.

  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 St., Monday-Friday between 8 a.m. and 4:30 p.m., beginning July 15 through July 30. No weekend deliveries, and absolutely no exhibits will be accepted before July 15 due to limited space to store exhibits.

  D. **DELIVERY BY MAIL.** Competitors who send exhibits by mail or express must send entries PRIOR to July 30. Address to: Superintendent K-12 Competitions, Minnesota State Fair, 1265 Snelling Ave. N., St. Paul, MN 55108.

    1. The exhibitor's name and address must be plainly written on the outside of the package and also placed on a card inside.

    2. A LIST OF EXHIBITS BEING SENT MUST BE ENCLOSED WITH EXHIBIT DESCRIPTIONS.

    3. All express and parcel post charges must be prepaid by the sender. 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 exhibits to the exhibitor. DO NOT SEND STAMPS. No exhibits will be shipped back to a P.O. box.

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 ribbons unless exhibits are deemed worthy of merit. If no competition exists and an exhibit is not worthy of a first place ribbon, the judge may award a lesser place ribbon or NO ribbons at all, according to his or her judgment. All announcements of winners will be made through the superintendent's office. The list of winners' names in each exhibit 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 exhibits 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. 4, and Thursday, Sept. 5, 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 above must be made through the competition department by calling 651-288-4417 on or after Sept. 10.

E.   **All entries must be picked up by Dec. 2.** All entries must be picked up by, Monday, Dec. 2, 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 are 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 exhibitors from COMPAS.

10. **SPECIAL AWARDS - TECHNOLOGY and ENGINEERING EXHIBITS**
A.   **Minnesota Technology and Engineering Educators Association (MTEEA)** is offering a $300 scholarship to any exhibit 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 one $400 scholarship for outstanding craftsmanship and technology presentation in any of the woodworking categories. This scholarship will be available to any junior or senior who intends to pursue a post-high school education at any college, vocational or trade school.

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

22   Woodworking: small furniture

23   Woodworking: not furniture

24   Individual project: anything interesting or creative in tech ed

25   Cars: CO2 or compressed air

26   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 project.

40   Sweepstakes, Technology and Engineering Exhibits

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: multicolor

16 Electricity: wiring, electronic buzzers, ringers, small robots (no Lego®)

17 Automotive: small gas engines

18 Robotics: electronics

19 General plastics: clocks and other

20 General metals: sheet/machining/welding

21 Woodworking: large furniture

22 Woodworking: small furniture

23 Woodworking: not furniture

24 Individual project: anything interesting or creative in tech ed

25 Cars: CO2 or compressed air

26 Rocketry and flight

27 Group project: FTC robotics

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 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 project.

40 Sweepstakes, Technology and Engineering Exhibits (classes 1-26)

41 Sweepstakes, Group project FTC robotics (class 27, grades 7-12 combined)

42 Sweepstakes, Group projects (classes 28-29)

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 - andscape/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: multicolor

16   Electricity: wiring, electronic buzzers, ringers, small robots (no Lego®)

17   Automotive: small gas engines

18   Robotics: electronics

19   General plastics: clocks and other

20   General metals: sheet/machining/welding

21   Woodworking: large furniture

22   Woodworking: small furniture

23   Woodworking: not furniture

24   Individual project: anything interesting or creative in tech ed

25   Cars: CO2 or compressed air

26   Rocketry and flight

27   Group project: FTC robotics

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 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 project.

40   Sweepstakes, Technology and Engineering Exhibits (classes 1-26)

41   Sweepstakes, Group project FTC robotics (class 27, grades 7-12 combined)

42   Sweepstakes, Group projects (classes 28-29)

Division 2D: Technology and Engineering Exhibits, Grade 9

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: multicolor

16 Electricity: wiring, electronic buzzers, ringers, small robots (no Lego®)

17 Automotive: small gas engines

18 Robotics: individual

19 General plastics: clocks and other

20 General metals: sheet/machining/welding

21 Woodworking: large furniture

22 Woodworking: small furniture

23 Woodworking: not furniture

24 Individual project: anything interesting or creative in tech ed

25 Cars: CO2 or compressed air

26 Rocketry and flight

27 Group project: FTC robotics

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 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 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 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 project is engineered and all of its functions.

40 Sweepstakes, Technology and Engineering Exhibits (classes 1-26)

41 Sweepstakes, Group project FTC robotics (class 27, grades 7-12 combined)

42 Sweepstakes, Group project (classes 28-29, grades 9-12 combined)

43 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: multicolor

16 Electricity: wiring, electronic buzzers, ringers, small robots (no Lego®)

17 Automotive: small gas engines

18 Robotics: individual

19 General plastics: clocks and other

20 General metals: sheet/machining/welding

21 Woodworking: large furniture

22 Woodworking: small furniture

23 Woodworking: not furniture

24 Individual project: anything interesting or creative in tech ed

25 Cars: CO2 or compressed air

26 Rocketry and flight

27 Group project: FTC robotics

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 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 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 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 project is engineered and all of its functions.

40 Sweepstakes, Technology and Engineering Exhibits (classes 1-26)

41 Sweepstakes, Group project FTC robotics (class 27, grades 7-12 combined)

42 Sweepstakes, Group project (classes 28-29, grades 9-12 combined)

43 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: multicolor

16 Electricity: wiring, electronic buzzers, ringers, small robots (no Lego®)

17 Automotive: small gas engines

18 Robotics: individual

19 General plastics: clocks and other

20 General metals: sheet/machining/welding

21 Woodworking: large furniture

22 Woodworking: small furniture

23 Woodworking: not furniture

24 Individual project: anything interesting or creative in tech ed

25 Cars: CO2 or compressed air

26 Rocketry and flight

27 Group project: FTC robotics

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 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 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 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 project is engineered and all of its functions.

40 Sweepstakes, Technology and Engineering Exhibits (classes 1-26)

41 Sweepstakes, Group project FTC robotics (class 27, grades 7-12 combined)

42 Sweepstakes, Group project (classes 28-29, grades 9-12 combined)

43 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: multicolor

16 Electricity: wiring, electronic buzzers, ringers, small robots (no Lego®)

17 Automotive: small gas engines

18 Robotics: individual

19 General plastics: clocks and other

20 General metals: sheet/machining/welding

21 Woodworking: large furniture

22 Woodworking: small furniture

23 Woodworking: not furniture

24 Individual project: anything interesting or creative in tech ed

25 Cars: CO2 or compressed air

26 Rocketry and flight

27 Group project: FTC robotics

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 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 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 project is engineered and all of its functions.

40 Sweepstakes, Technology and Engineering Exhibits (classes 1-26)

41 Sweepstakes, Group project FTC robotics (class 27, grades 7-12 combined)

42 Sweepstakes, Group project (classes 28-29, grades 9-12 combined)

43 Sweepstakes, Group projects FRC robotics (classes 30-31)