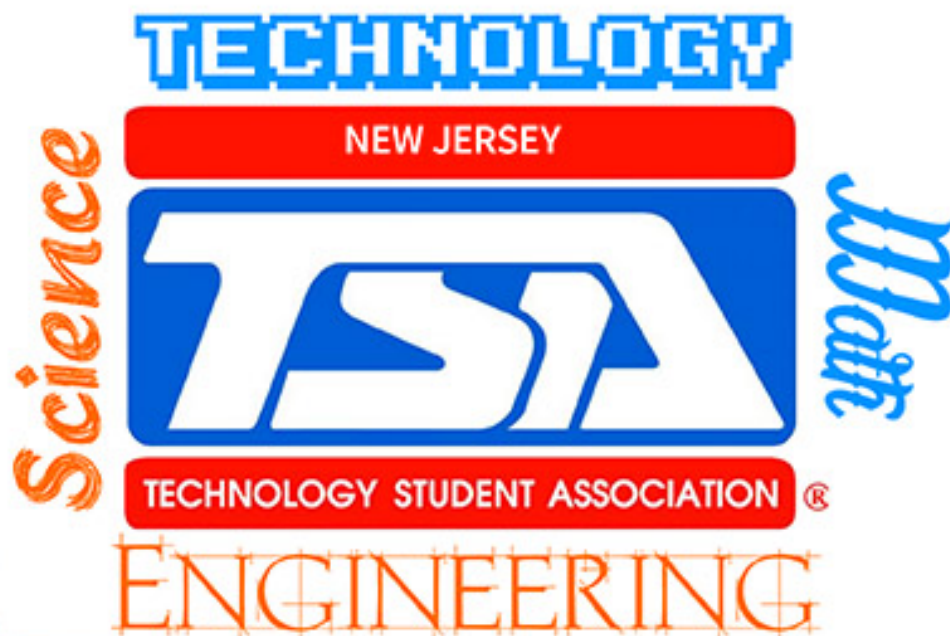




**2019 NJ TSA
Middle School
Supplement**



Cover Art Inspired By:
Matthew Ritsan
Marlboro Middle School
1st Place Promotional Marketing
2018 NJ TSA Middle School Conference

2018-2019 New Jersey TSA Executive Committee

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Hannah Valdes	President	Colts Neck High School
Jessica Kaiser	Vice President	Freehold Township High School
Regan Riehl	Secretary	Colts Neck High School
Kate Donnelly	Treasurer	Marine Academy of Science and Technology
David Wagenblast	Reporter	Howell High School
Khushi Sabuwala	Sergeant-at-Arms	High Technology High School
Evan Wax	Historian	Clearview Regional High School
Jimmy Guinee	Parliamentarian	Howell High School

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Ms. Melissa Parr	Clearview Regional High School
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Mr. Thomas Jennings	Freehold Township High School
Ms. Jennifer Garrity	High Technology High School
Ms. Sherry Roses	Howell High School
Ms. Wendy Green	Marine Academy of Science & Technology

State Regional Coordinator

Ms. Sherry Roses	Howell High School
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State Advisor and Corporate Member

Mrs. Alison Goeke, Center for Excellence in STEM Education, Department of Technological Studies, School of Engineering, The College of New Jersey

Competitive Event Coordinator

Mr. Henry Harms, Center for Excellence in STEM Education, Department of Technological Studies, School of Engineering, The College of New Jersey

Business Administrator

Ms. Rebecca Turner, Center for Excellence in STEM Education, Department of Technological Studies, School of Engineering, The College of New Jersey

Foreword

The diverse competitive events that are listed within this booklet are open to TSA chapters affiliated through registration with the New Jersey state office of TSA, completed by January 31, 2019. The Middle School State Conference will be held at The College of New Jersey on April 3, 2019.

How this booklet works

The *NJ Supplement* works in conjunction with the National TSA Competitive Events Guide, which you will receive access to online after affiliation with the National TSA Office has taken place.

This booklet presents the competitive events offered at the NJ State Conference in alphabetical order as well as the maximum number of participants or teams permitted to compete from each chapter. Each New Jersey competitive event in this booklet lists only the modifications from the National guidelines. Substitute the NJ modification in this booklet for the number or letter on the National guidelines to ensure that your chapter meets the guidelines for the NJ Competitive Events.

Competitive Event Categories

Competitive Events are organized according to the requirements for student participation in those competitions. There are three categories: **On-Site, Pre-Conference and Static**.

“On-site Events” require student participation on conference day. Some On-Site Events may even include components that must be completed and submitted prior to conference day. Because of the time commitment involved, students may participate in only one On-Site Event (and no more than six total events).

“Pre-Conference Events” require that entries be submitted prior to the conference, on a designated submission date established by NJ TSA. These entries are judged days prior to the conference and put on display the day of the conference. Some Pre-Conference events may have components or presentations that also take place the day of the conference.

“Static Events” require students to submit entries on conference day, however, students are not required to remain with their entries or make presentations. Static Events usually consist of students creating a display or prototype. These entries are checked-in the morning of the conference in the designated event room listed in the conference program. Judging takes place behind closed doors. After judging is finished, all entries are put on display for the remainder of the conference day.

Please be sure to read all sections of the *Supplement* carefully!

It is the hope of the NJ TSA Executive Committee that this guide will enable teachers, advisors, students and competitive event judges to be better prepared for participation at the State Conference this spring.

Any questions may be directed to Ms. Alison Goeke, NJ TSA State Advisor at (609)771-3244 or goeke2@tcnj.edu or Henry Harms, NJ TSA Competitive Event Coordinator, at harms@tcnj.edu.

General Rules Governing Competitive Events

I. MIDDLE SCHOOL EVENTS

The officially approved **Level I** New Jersey TSA Competitive Events are:

<u>ON-SITE</u>	<u>PRE-CONFERENCE</u>	<u>STATIC</u>
Challenging Technology Issues 2 teams of 2 members per chapter	CAD Foundations 2 individuals per chapter	Biotechnology 2 teams of up to 6 members per chapter
Chapter Team 2 teams of 6 members per chapter	Career Prep 2 individuals per chapter	Medical Technology 2 teams of 2-6 members per chapter
Construction Challenge 2 teams of up to 6 members per chapter	Children's Stories 2 teams of up to 6 members per chapter. A team of 1 individual is permitted.	Off the Grid 2 teams of up to 6 members per chapter
Electrical Applications 2 individuals per chapter	Coding 2 teams of 2 members per chapter	System Control Technology 2 teams of 3 members per chapter
Essays on Technology 2 individuals per chapter	Community Service Video 1 team of up to 6 members per chapter. A team of 1 individual is permitted.	
Flight 2 individuals per chapter	Digital Photography 2 individuals per chapter	
Forensic Technology 1 team of 2 members per chapter	Dragster 2 individuals per chapter <i>(Top 16 cars raced on conference day)</i>	
Inventions and Innovations 1 team of 3-6 members per chapter	Mass Production 2 teams of 2-6 members per chapter	
Junior Solar Sprint 1 team of 2-4 members per chapter	Promotional Marketing 2 individuals per chapter	
Leadership Strategies 2 teams of 3 members per chapter	STEM Animation 2 teams of up to 6 members per chapter	
Mechanical Engineering 2 teams of 3-6 members per chapter	Technical Design 2 teams of 2 members per chapter	
Microcontroller Design 2 teams of 3-5 members per chapter	Video Game Design 1 team of 2-6 members per chapter	
Prepared Speech 2 individuals per chapter	Website Design 1 team of 3-6 members per chapter	
Problem Solving 1 team of 2 members per chapter		
Structural Engineering 1 team of 2 members per chapter		
Tech Bowl 1 team of 3 members per chapter		

II. PROJECT SUBMISSION

- A. On-site events require students to submit entries, make presentations and/or participate/compete in activities *at* the conference.
- B. Static events require students to submit a display or prototype the day of the conference, however, there is no presentation component along with the entry.
- C. Pre-Conference events require projects to be submitted and judged *prior to* the conference

1. Pre-Conference entries mailed must be received by **March 21 , 2019**

Send to:
NJ TSA/Alison Goeke
The College of New Jersey
2000 Pennington Rd
Armstrong 103
Ewing, NJ 08628

Please call (609)771-3244 or email (tsa@tcnj.edu) the NJ TSA office to indicate description/quantity of items being mailed and expected delivery date.

2. Entries dropped off at the NJ TSA office at The College of New Jersey must be received by **March 21, 2019**. Please call (609)771-3244 or email (tsa@tcnj.edu) the TSA office to arrange time for delivery.
3. A Northern NJ drop off site will be available on **March 20, 2019** from 3:30-5:00pm at Heritage Middle School, 20 Foxcroft Drive, Livingston, NJ 07039.
 - Items received after these dates may not be included in competitions.
 - Mailed deliveries should include provision for obtaining **proof of delivery**.
 - Packages should include a label or packing slip describing contents.

III. PARTICIPATION IN COMPETITIVE EVENTS

- A. TSA members may only register and participate in **ONE on-site event**, and no more than **SIX total events**.
- B. Students must be registered at the state conference in order to enter and become finalists/winners in a competition. **NO ON-SITE OR LATE REGISTRATIONS WILL BE ACCEPTED.**
- C. **No substitutions will be accepted after registration closes, or at the conference.** Substitutions in team events will be accepted only from pre-registered applicants, and only under extenuating circumstances.

- D. **No school or individual names labeled on projects** except for events which require school/student information. **Otherwise only ID#'s are to be used.** Upon registering students online for the state conference, they are automatically assigned a state conference ID#. **This state conference ID number needs to be labeled on every piece of a project/entry (i.e. portfolios, USB drives, models, displays, copyright/release forms, etc.).**
- E. For all entries that require documentation materials (comprising a "portfolio") secured in a **CLEAR FRONT REPORT COVER**, visit this [site](#) for a sample report cover.
- F. Please be sure to make a copy of all video/electronic files (e.g. Promotional Marketing, STEM Animation, etc.) for yourself before the project is submitted.
- G. Projects/entries are picked up at the time stated in the conference program and/or event display room. All entries not accounted for will be discarded the following day if no arrangements have been made with the NJ TSA office otherwise.
- H. Audio visual equipment will be provided for those competitive events that require it (e.g. laptops, projectors, etc.).
- I. NJ TSA is not responsible for compatibility issues with electronic files. Judges will not be permitted to install programs to view files.
- J. Proper procedures for citing material taken from other sources must be followed as outlined in specific competitive event guidelines. Copyright procedures and forms must be completed and submitted with entries when necessary.
- K. No electronic communication devices of any kind are permitted during competitions and will result in disqualification.
- L. No one will be permitted to leave a test event and return unless otherwise instructed by judges.
- M. The maximum size of a team is 6 members, unless otherwise designated in a competition's eligibility guideline.
- N. In addition to the information found in the NJ Supplement, participants are responsible for knowing any updates, changes or clarifications that are made to competitive events prior to participation. This information is posted on both the National TSA and NJ TSA websites. It is crucial that students check the Competition Updates page of BOTH the NJ and National TSA websites. DIFFERENT information is posted on each site.

IV. COMPETITIVE EVENT ATTIRE

ALL STUDENTS ATTENDING THE CONFERENCE **MUST** wear either official TSA or business-like attire. Your cooperation with this policy will assist in providing a positive image for the organization and its members. *For more info go to: <http://www.tsaweb.org/Dress-Code>*

NOTE: All students participating at the 2018 National TSA Conference will be required to wear the Official TSA Shirt (royal blue). Students are strongly encouraged to wear the Official TSA Shirt to the 2018 NJ TSA State Conference.

- A. Official TSA Attire:
 - Blazer: navy blue with official TSA patch
 - Tie: scarlet red imprinted with official TSA logo (for males only)
 - Shirt or blouse: Official TSA Shirt (royal blue) (A white button-down with turn down collar may be substituted for the Official TSA Shirt at the NJ State Conference)

Pants or skirt: light gray
Dark socks: males only (black or dark blue)
Shoes: black dress shoes (unacceptable: athletic shoes, combat or work boots)
Sandals: females only may wear black open toe shoes or sandals

- B. Business-like attire is considered to minimally include:
A collared shirt/blouse, long pants (no shorts or jeans), dresses/skirts, socks/hosiery and appropriate footwear.
- C. The official NJ TSA or National TSA Polo Shirt may be substituted for a collared shirt/blouse.

Students not wearing official TSA or business-like attire *will lose 20 points from their total score of each event entered and will not be granted entry into the awards ceremony.*

A 20 point deduction will also result from the wearing of hats.

All individuals attending the awards ceremony must present their official State Conference ID Badge provided to them at registration. Anyone not in possession of their badge will not be admitted to the awards ceremony.

V. PROPERTY DAMAGE OR LOSS

The College of New Jersey and NJ TSA are not responsible for damage to or loss of property brought to the conference.

VI. AWARDS

TSA Technology Honor Society

The TSA Technology Honor Society recognizes TSA members who excel in academics, leadership, and service to their school and community. The TSA Technology Honor Society is (1) an opportunity for student members to be recognized for their efforts and (2) designed to recognize TSA members who exemplify the high ideals of academics. Please send completed forms to Alison Goeke (goeke2@tcnj.edu/Fax#609-771-3330) by 5:00pm on March 14, 2018. Go to <http://www.tsaweb.org/Student-Achievement-Awards> to view and print forms.

VII. IMPORTANT DATES AND DEADLINES

January 14, 2019

- State Conference Registration OPENS

January 14, 2019

- Design Problems for the following events posted on the [NJ TSA website](#):
 - CAD Foundations
 - Coding
 - System Control Technology
- Note- all other design problems/themes for 2019 can be found on the [National TSA website](#)

February 28, 2019

- Technical Design brief posted at 5pm on [NJ TSA website](#)

March 5, 2019

- Technical Design entries must be received by the NJ TSA office, or postmarked, by 5pm.

March 20, 2019

- All Pre-Conference entries delivered to the Northern NJ Drop-Off Site must be received.

March 21, 2019

- All Pre-Conference entries must be received at the NJ TSA office.

March 21, 2019

- Technology Honor Society and State Officer Nominations must be received at the NJ TSA office by 5pm.

March 22, 2019

- State Conference Registration CLOSES at 5pm (absolutely no changes can be made after this time).

April 3, 2019

- NJ TSA Middle School State Conference, The College of New Jersey

June 28-July 2, 2019

- National TSA Conference, National Harbor, Maryland

Plan now to attend the
41th Annual
National TSA Conference
June 28-July 2, 2019
Gaylord National Resort
National Harbor, Maryland
Theme: *"Model the Way"*

Level I – Middle School Events

Biotechnology Static Event

OVERVIEW:	No semifinalists. No presentation/interview. Documentation and display submitted on conference day (Static Event).
ELIGIBILITY:	2 teams of up to 6 members per chapter. No semifinalist round.
TIME LIMITS:	No semifinalist interview/presentation. Static Event.
LEAP:	No LEAP Response
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Pre-conference:</u> No change</p> <p><u>Preliminary Round:</u> 1. Entries are submitted on conference day (Static Event). No LEAP Response. 4. No semifinalists. Winners announced at Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No LEAP Response. No semifinalist presentation/interview. Top three winners will be announced at Awards Ceremony. Teams should pick up their entries prior to leaving the conference.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No presentation/interview. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	<p>Delete 3. No semifinalist presentation/interview. Delete 4. No LEAP Response.</p> <p>Evaluation is based on 90 points:</p> <ul style="list-style-type: none"> • Documentation (50) • Display (40)

CAD Foundations

Pre-Conference Event

2019 Design Problem will be posted on the NJ TSA website on January 14, 2019

OVERVIEW:	No change This design problem will be posted on the NJ TSA website on January 14, 2019.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	Delete 1-3. Entries must be completed during the school year and are submitted Pre-Conference. There is no on-site component. Design problem will be posted on the NJ TSA website on January 14, 2019.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<u>Preliminary Round:</u> Delete 1-8. Entries are submitted Pre-Conference. No on-site component. No semifinalists. <u>Delete Semifinal Round.</u> No LEAP Response. No semifinalists. Top three winners will be announced at Awards Ceremony.
REGULATIONS:	<u>Preliminary Round:</u> Delete A-D. Delete F-G. Designs must be submitted on a maximum paper size of 24" x 36" or smaller sheets mounted on a 24" x 36" sheet with no overlapping papers. <u>Delete Semifinal Round.</u> No LEAP Response. <i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i>
EVALUATION:	1. Delete "on-site problem." Entries are submitted Pre-Conference. Delete 2. No LEAP Response. Evaluation is based on 100 points: <ul style="list-style-type: none"> • Layout (70) • Software Utilization (30)

Career Prep

Pre-Conference Event

In 2019, students select a career from one (1) of the following career clusters:

- Health Science
- Information Technology
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics

OVERVIEW:	No semifinalists. No interview. Letter and resume submitted Pre-Conference.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	No semifinalists. No interview.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 4-5. Letter and resume submitted Pre-Conference. 5.3. No LEAP Response. 6-7. No semifinalists. Top three winners announced at Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> E.-F. Letter and resume are submitted Pre-Conference. No LEAP Response. <i>Please be sure that submissions have fictitious home address and telephone number. Correct participant names must be used.</i></p> <p><u>Delete Semifinal Round.</u> No semifinalists. No LEAP Response.</p> <p>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</p>
EVALUATION:	<p>Delete 3. No interview. No semifinalists. No LEAP Response.</p> <p>Evaluation is based on 70 points:</p> <ul style="list-style-type: none"> • Letter of Introduction (40) • Event Specific Resume (30)

Challenging Technology Issues

On-Site Event

2019 Topics:

- A U.S. space force
- 3D printed homes in a third world country
- Online textbooks for all classes
- U.S. tariffs on imports

OVERVIEW:	No change
ELIGIBILITY:	2 teams of 2 members per chapter
TIME LIMITS:	No change
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> Delete 1.b. No LEAP Response. Delete 5. No semifinalists.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATONS:	Delete E. No semifinalists. No LEAP Response.
EVALUATION:	<p>Delete 2. No semifinalists. No LEAP Response.</p> <p>Evaluation is based on 150 points:</p> <ul style="list-style-type: none"> • Pro Side (70) • Con Side (70) • Participation (10)

Chapter Team On-Site Event

OVERVIEW:	No semifinals. All teams participate in both the written exam and the oral presentation.
ELIGIBILITY:	2 teams of 6 members per chapter. C. No semifinalists. All teams take the written test and participate in the oral presentation.
TIME LIMITS:	B. No semifinalists. All teams make oral presentation. Time-related penalties apply.
LEAP:	No LEAP Response.
ATTIRE:	Participants may wear Official TSA Attire OR Business-Like Attire , as described on Page 6-7 of this guide.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. No LEAP Response. 3. No semifinalists. All teams will make the oral presentation.</p> <p><u>Semifinal Round:</u> 1-2. No semifinalists. All teams make oral presentation. Delete 3. No LEAP Response. No semifinalists. 4. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> A.1. No semifinalists. All teams participate in oral presentation.</p> <p><u>Semifinal Round:</u> E-F. No semifinals. All teams participate in oral presentation. Delete G. No LEAP Response.</p>
EVALUATION:	<p>1.b. No semifinalists. All teams make oral presentation. Final score based on written test and oral presentation.</p> <p>Delete 2. No LEAP Response. No semifinalists.</p> <p>Evaluation is based on 220 points:</p> <ul style="list-style-type: none"> • Written test (10) • Business Meeting Demonstration (190) • Possible Bonus (20)

Children's Stories

Pre-Conference Event

2019 Theme: Tactile STEM Book

Design a tactile picture book that explains a STEM concept of your choice for children with a disability.

OVERVIEW:	No change
ELIGIBILITY:	2 teams of up to 6 members per chapter. A team of 1 individual is permitted.
TIME LIMITS:	No Semifinal Round. No on-site component. Portfolio and storybook submitted Pre-Conference.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Pre-conference:</u> No change</p> <p><u>Preliminary Round:</u> 2. Storybook and portfolio submitted Pre-Conference. No LEAP Response. Delete 4. No semifinalists.</p> <p><u>Delete Semifinal Round.</u> No on-site component. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No on-site component. No LEAP Response. Top three winners announced at Awards Ceremony.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	<p>No Semifinal Round. No LEAP Response.</p> <p>Evaluation is based on 180 points:</p> <ul style="list-style-type: none"> • Documentation (50) • Storybook (130)

Coding

Pre-Conference Event

Design Problem will be posted on the NJ TSA website on January 14, 2019

OVERVIEW:	No written test. No on-site programming challenge. No semifinalists. Entries are submitted Pre-Conference. Design problem will be posted on the NJ TSA website on January 14, 2019.
ELIGIBILITY:	2 teams of 2 members per chapter.
TIME LIMITS:	Delete 1-2. No written test. No on-site challenge. Design problem will be posted on the NJ TSA website on January 14, 2019. Entries are submitted Pre-Conference. Submission instructions will be included in design problem.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<u>Delete Preliminary Round and Semifinal Round.</u> No written test. No on-site challenge. No semifinalists. No LEAP Response. Design problem will be posted on the NJ TSA website on January 14, 2019. Entries are submitted Pre-Conference. Submission instructions will be included in design problem. Top three winners will be announced at Awards Ceremony.
REGULATIONS:	<u>Delete Preliminary Round and Semifinal Round.</u> No written test. No on-site challenge. No semifinalists. No LEAP Response. Design problem will be posted on the NJ TSA website on January 14, 2019. Entries are submitted Pre-Conference. Submission instructions will be included in design problem. Top three winners will be announced at Awards Ceremony.
EVALUATION:	Evaluation criteria will be included with the design problem.

Community Service Video Pre-Conference Event

OVERVIEW:	No change.
ELIGIBILITY:	1 team of up to 6 members per chapter. A team of 1 individual is permitted.
TIME LIMITS:	No change.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. Video submitted Pre-Conference. No LEAP Response. 3. No semifinalists.</p> <p><u>Delete Semifinal Round.</u> No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No LEAP Response.</p>
EVALUATION:	<p>Delete 2. No semifinalists. No LEAP Response.</p> <p>Evaluation is based on 150 points:</p> <ul style="list-style-type: none"> • Video Production (70) • Video Effectiveness (80)

Construction Challenge

On-Site Event

OVERVIEW:	No semifinalists. All teams participate in presentation/interview.
ELIGIBILITY:	2 teams of up to 6 members per chapter. No semifinalists. All teams participate in presentation/interview.
TIME LIMITS:	2. No Semifinal Round/semifinalists. All teams participate in presentation/interview.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. No LEAP Response. 4. No semifinalists. All teams participate in presentation/interview.</p> <p><u>Semifinal Round:</u> 1. No semifinalists. All teams participate in presentation/interview. Delete 4. No LEAP Response. No semifinalists. 5. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Semifinal Round:</u> A. No semifinalists. All teams participate in presentation/interview. Delete B. No LEAP Response. No semifinalists.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	<p>2. No semifinalists. All teams participate in presentation/interview. No LEAP Response.</p> <p>Evaluation is based on 120 points:</p> <ul style="list-style-type: none"> • Display (40) • Portfolio (30) • Presentation Interview (50)

Digital Photography
Pre-Conference Event
 2019 Theme: Landscape of Seasons

OVERVIEW:	No semifinalists. No on-site task. Entries are submitted Pre-Conference.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	Delete Semifinal Round. No on-site task. No semifinalists.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. Participants submit their digital album Pre-Conference. No LEAP Response. 4. No semifinalists.</p> <p><u>Delete Semifinal Round</u> No semifinalists. No on-site task. No LEAP Response. Top three winners announced at award ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round</u> No semifinalists. No on-site task. No LEAP Response. Top three winners announced at award ceremony.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i></p>
EVALUATION:	<p>Delete 2. No Semifinal Round. No on-site task. No LEAP Response.</p> <p>Evaluation is based on 100 points:</p> <ul style="list-style-type: none"> • Album (60) • Photographic Principles and Image Editing (40)

Dragster

Pre-Conference Event

There are no special specifications or theme for 2019. Refer to the event's regulations and procedures for all specifications.

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter.
TIME LIMITS:	1. Dragster and drawing submitted Pre-Conference. 2. No interview. <i>Cars that do not meet specifications will NOT be raced</i>
LEAP:	No LEAP Response
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<u>Preliminary Round:</u> 1. Dragster and drawing submitted Pre-Conference. No LEAP Response. <u>Semifinal Round:</u> 1. No interview. Delete 5. No LEAP Response. 6. Top three winners will be announced at Awards Ceremony.
REGULATIONS:	No interview. No LEAP Response. <i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i>
EVALUATION:	Delete 3. No Interview. Delete 5. No LEAP Response. Evaluation is based on 110 points: <ul style="list-style-type: none"> • Dragster Construction (50) • Race (60) <p><i>The top 16 dragsters meeting specifications will be raced in the double elimination bracket at the conference.</i></p> <p><u>Cars not meeting specs WILL BE DISQUALIFIED from competition.</u></p> <p><i>Place ID# on drawings and directly on dragster. It is recommend ID#'s are placed on bottom or back side of dragster with tape or label.</i></p>

Electrical Applications

On-Site Event

OVERVIEW:	Written test only. No semifinalists. No on-site problem or interview. Winners announced at award ceremony.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	Delete Semifinal Round. No on-site problem or interview.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. No LEAP Response. Delete 3-4. No semifinalists. Top three winners announced at Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No on-site problem or interview. Written test only. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> A. Answer sheets, paper and pencils provided.</p> <p><u>Delete Semifinal Round.</u> No on-site problem or interview. Written test only. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
EVALUATION:	<p>Delete 2. No Semifinal Round. No on-site problem or interview. Written test only. No LEAP Response.</p> <p>Evaluation is based on 50 points:</p> <ul style="list-style-type: none"> • Written test (50 points)

Essays on Technology

On-Site Event

2019 Topic: Pollution is defined as the contamination of soil, water and/or the atmosphere with man-made waste. The struggle to control pollution has been on-going; however, increased modern conveniences have contributed significantly to our society's battle to fight pollution. Discuss the ways in which modern conveniences have had a negative impact on pollution. Consider past and current efforts, as well as possible future solutions to control pollution as they relate to each of the following sub topic.

- Air
- Land
- Water

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	No semifinalists. All participants write outline (1 hour) and essay (1 hour).
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 7. No semifinalists.</p> <p><u>Semifinalist Round:</u> No semifinalists. All participants write essay. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> D. Note: Participants must bring their own blue or black ink pen. Paper is provided. O. No semifinalists. All participants write essay on a subtopic.</p> <p><u>Semifinalist Round:</u> No semifinalists. All participants write essay. Delete H. No LEAP Response.</p>
EVALUATION:	<p>2. No Semifinalists. All participants write outline and essay. No LEAP Response.</p> <p>Evaluation is based on 180 points:</p> <ul style="list-style-type: none"> • Detailed Outline (80) • Essay (100)

Flight On-Site Event

OVERVIEW:	Students bring completed glider and portfolio to event.
ELIGIBILITY:	2 individuals per chapter
SAFETY:	Safety glasses are not required for this event.
TIME LIMITS:	Delete 1. Students bring completed glider to event
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. Participants report to event area with their glider and portfolio. No LEAP Response. Delete 2. Glider is constructed off-site. 7. No semifinalists.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> Delete A. Safety glasses are not required for this event. B.2. Glider is constructed off-site. D-M. Plane built off-site using specified materials. Catapult provided by NJ TSA.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No LEAP Response. Top three winners announced at Awards Ceremony.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	<p>Delete 3. No semifinalists. No LEAP Response.</p> <p>Evaluation is based on:</p> <ul style="list-style-type: none"> • Documentation (60) • Flight Score

Forensic Technology

On-Site Event

OVERVIEW:	No semifinalists. All teams take written test and analyze mock crime scene. Winners announced at award ceremony.
ELIGIBILITY:	1 team of 2 members per chapter.
TIME LIMITS:	2. No semifinalists. All teams analyze mock crime scene. 2.a. Ten (10) minutes is allowed to review the crime scene and gather evidence. Time concludes after Ten (10) minutes.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u></p> <p>1. No LEAP Response. 3-4. No semifinalists. All teams participate in on-site problem.</p> <p><u>Semifinal Round:</u></p> <p>1. No semifinalists. All teams participate in on-site problem. 3. No semifinalists. No LEAP Response. 4. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u></p> <p>B. No semifinalists. All teams participate in on-site problem.</p> <p><u>Semifinal Round:</u></p> <p>No semifinalists. All teams participate in on-site problem Delete F.11. and F.12. No fingerprint dust, duster or lifting tape needed. Delete G.1. No collection of fingerprints. Delete H. No LEAP Response.</p>
EVALUATION:	<p>1.b. No semifinalists. All teams participate in on-site problem. 2. No semifinalists. No LEAP Response.</p> <p>Evaluation is based on 120 points:</p> <ul style="list-style-type: none"> • Written Test (50) • Analysis of Crime Scene (70)

Inventions and Innovations

On-Site Event

OVERVIEW:	No semifinalists. All teams participate in oral presentation and interview.
ELIGIBILITY:	<p><u>Preliminary round:</u> 1 team of 3-6 members per chapter.</p> <p><u>Semifinal round:</u> No semifinalists. All teams participate in oral presentation and interview.</p>
TIME LIMITS:	No semifinalists. All teams participate in oral presentation and question/answer session.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Pre-conference:</u> No change</p> <p><u>Preliminary Round:</u> 1. No LEAP Response. 3. No LEAP Response. 5. No semifinalists. All teams will make an oral presentation.</p> <p><u>Semifinal Round:</u> 1. No semifinalists. All teams sign up for an oral presentation. 3. No LEAP Response. 4. Top three winners will be announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Semifinal Round:</u> A. No semifinalists. All teams make oral presentation. Delete B. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	<p>2. No semifinalists. All teams make oral presentation. Delete 2.b. No LEAP Response.</p> <p>Evaluation is based on 150 points:</p> <ul style="list-style-type: none"> • Static Entry (70) • Presentation/Interview (80)

Junior Solar Sprint On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	1 team of 2-4 members per chapter.
TIME LIMITS:	No change
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. No LEAP Response.</p> <p><u>Semifinal Round:</u> 2. No LEAP Response. 3. Top three winners will be announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> I. Teams must provide their own battery pack and batteries. Batteries used must be two (2) AA 1.5 V batteries. It is recommended that teams test their vehicle with their battery pack prior to the conference.</p> <p><u>Semifinal Round:</u> Delete D. No LEAP Response. E. Top three winners will be announced at Awards Ceremony.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	<p><u>Preliminary Round:</u> No change.</p> <p><u>Semifinal Round:</u> Delete 3. No LEAP Response.</p> <p>Evaluation is based on 150 points:</p> <ul style="list-style-type: none"> • Display and Model (40) • Documentation (50) • Race (60)

Leadership Strategies

On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	2 teams of 3 members per chapter
TIME LIMITS:	No change
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. No LEAP Response. Delete 8. No semifinalists. All teams make a presentation. No observers.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. All teams make presentation. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	No semifinals. All teams make a presentation. No observers allowed. No LEAP Response.
EVALUATION:	Delete 2. No LEAP Response. Evaluation is based on 80 points: <ul style="list-style-type: none"> • Presentation (80)

Mass Production

Pre-Conference Event

2019 Theme: A desktop novelty item. (Something that serves no purpose other than to entertain a visitor to a person's workspace. No electronic parts are permitted.)

OVERVIEW:	No change
ELIGIBILITY:	2 teams of 2-6 members per chapter. No semifinalists. No presentation/interview. Entries are submitted Pre-Conference.
TIME LIMITS:	No semifinalists. No presentation/interview. Entries submitted Pre-Conference.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Pre-conference:</u> No change.</p> <p><u>Preliminary Round:</u> 1. Portfolio and product are submitted Pre-Conference. No LEAP Response. 2. Please follow Pre-Conference submission guidelines. 4. No semifinalists. No presentation/interview. Winners are announced at Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No presentation/interview. No LEAP Response. Top three winners will be announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No presentation/interview. Entries submitted Pre-Conference. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i></p>
EVALUATION:	<p>Delete 2. No Semifinal Round. No presentation/interview. No LEAP Response.</p> <p>Evaluation is based on 110 points:</p> <ul style="list-style-type: none"> • Static Entry (110)

Mechanical Engineering On-Site Event

OVERVIEW:	No semifinalists. All teams participate in presentation/interview.
ELIGIBILITY:	2 teams of 3-6 members per chapter.
TIME LIMITS:	No semifinalists. All teams participate in presentation/interview.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Pre-conference:</u> No change</p> <p><u>Preliminary Round:</u> 1. No LEAP Response. Delete 2.c. No LEAP Response. 4. No semifinalists. All teams do presentation/interview.</p> <p><u>Semifinal Round:</u> 1. No semifinalists. All teams sign up for presentation/interview time. Delete 2. No LEAP Response. 4. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Semifinal Round:</u> Delete C. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i></p>
EVALUATION:	<p>2. No semifinalists. No LEAP Response.</p> <p>Evaluation is based on 150 points:</p> <ul style="list-style-type: none"> • Static Entry (70) • Presentation/Interview (80)

Medical Technology

Static Event

OVERVIEW:	No semifinalists. No presentation. Entries are submitted on conference day for judging. (Static Event)
ELIGIBILITY:	2 teams of 2-6 members per chapter. No semifinalists. No presentation. Static Event.
TIME LIMITS:	No semifinalists. No presentation.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 3. No LEAP Response. Entries are submitted on conference day. Static Event. 6. No semifinalists. Winners are announced at the Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No presentation. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No presentation. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i></p>
EVALUATION:	<p>2. No semifinalists. No presentation. No LEAP Response. Entries are submitted on conference day. Static Event.</p> <p>Evaluations will be based on 150 points:</p> <ul style="list-style-type: none"> • Documentation (70) • Display (40) • Model/Prototype (40)

Microcontroller Design
On-Site Event
 2019 Theme: Smart Home Device

OVERVIEW:	No change
ELIGIBILITY:	2 teams of 3-5 members per chapter. All team members may participate in the presentation.
TIME LIMITS:	No change
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. No LEAP Response. 8. No semifinalists.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> E. Teams should pick up their entries at the time and place stated in the conference program.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No LEAP Response. Top three winners announced at Awards Ceremony.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	<p>Delete 4. No LEAP Response.</p> <p>Evaluation is based on 180 points:</p> <ul style="list-style-type: none"> • Documentation (20) • Product (100) • Presentation (60)

Off the Grid

Static Event

2019 Theme: Design a home for a family of four (4) and two (2) architecturally integrated food sources.

OVERVIEW:	No semifinalists. No presentation/interview. Teams submit entries on conference day for judging. (Static Event)
ELIGIBILITY:	2 teams of up to 6 members per chapter. Delete Semifinal Round. No presentation/interview. Entries submitted on conference day.
TIME LIMITS:	No semifinalists. No presentation/interview.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 4. No LEAP Response. 6. No semifinalists. Winners announced at Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No presentation/interview. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No presentation/interview. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i></p>
EVALUATION:	<p>Delete 2. No Semifinal Round. No semifinalists. No presentation/interview. No LEAP Response.</p> <p>Evaluations will be based on 170 points:</p> <ul style="list-style-type: none"> • Documentation (80) • Design Challenge (30) • Display and Model (60)

Prepared Speech
On-Site Event
 2019 Theme: Model the Way

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	No change
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. No LEAP Response. 4. No semifinalists. All students make one speech.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. All students make speech. No LEAP Response. Top three winners announced at award ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No semifinalists. All students make one speech. No LEAP Response. Top three winners announced at award ceremony.</p>
EVALUATION:	<p>Delete 3. No LEAP Response.</p> <p>Evaluation is based on 90 points:</p> <ul style="list-style-type: none"> • Content (30) • Stage Presence (30) • Organization (30)

Problem Solving On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	1 team of 2 members per chapter
TIME LIMITS:	Change time from 2 to 1.5 hours.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u></p> <ol style="list-style-type: none"> 1. No LEAP Response. 2. All equipment/materials provided by NJ TSA 3. Teams are allowed 1.5 hours to design and construct solution. 5. No semifinalists. Winners are announced at Awards Ceremony. <p><u>Delete Semifinal Round.</u></p> <ol style="list-style-type: none"> Delete 1. No LEAP Response. 2. Top three winners announced at Awards Ceremony.
REGULATIONS:	<p><u>Preliminary Round:</u></p> <p>Delete B-G. All equipment/materials provided by NJ TSA.</p> <p><u>Delete Semifinal Round.</u></p> <p>No LEAP Response.</p>
EVALUATION:	1-5. Evaluation will be based on a scoring guide provided at the event. No LEAP Response.

Promotional Marketing

Pre-Conference Event

2019 Theme: TSA Marketing Tool Kit

1. Printable: a banner 96"x 48" advertising a fundraiser for a new 3D printer and materials for the chapter to use for conferences
2. Wearable: a 1" lanyard for chapter members to wear at conferences
3. Digital Signage: The local school board has approved the beginning of a new TSA chapter at a new middle school in your county. Your chapter is going to assist them in getting started. The board has given your chapter 10 minutes to speak at the next board meeting. The advisor has required that you show the digital advertisement that will play in the lobby of the new school announcing the first meeting of this year.

OVERVIEW:	No semifinalists. No on-site problem. Entries submitted Pre-Conference.
ELIGIBILITY:	2 individuals per chapter.
TIME LIMITS:	Delete Semifinal Round. No semifinalists. No on-site problem.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> Delete 2. No LEAP Response. 3. Toolkit is submitted Pre-Conference on USB drive. No LEAP Response. 5. No semifinalists. Winners announced at Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No on-site problem. No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No on-site problem. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	<p>Delete 2. No LEAP Response. No semifinalists.</p> <p>Evaluation is based on 150 points:</p> <ul style="list-style-type: none"> • Print Design (50) • Wearable Marketing (50) • Digital Signage (50)

STEM Animation

Pre-Conference Event

2019 Theme:

Artificial intelligence (AI) is the theory and development of computer systems able to perform tasks that normally require human intelligence and cognitive functions. These functions may include, but are not limited to: learning, decision-making, problem-solving, speech recognition, translation between languages, and visual acuity.

AI is typically defined as the study of "intelligent agents," which are devices that perceive their environment and take actions to maximize their achievement. AI has the potential to impact humanity in a multitude of ways and is both fascinating and complicated. AI has the possibility of affecting countless lives. Create a STEM animation that demonstrates what AI is and could be.

OVERVIEW:	No semifinalists. No presentation. Entries submitted Pre-Conference.
ELIGIBILITY:	2 teams of up to 6 members per chapter.
TIME LIMITS:	<u>Preliminary Round:</u> No change <u>Delete Semifinal Round.</u> No semifinalists. No presentation. Entries submitted Pre-Conference.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<u>Preliminary Round:</u> 1. Entry is submitted Pre-Conference. No LEAP Response. 4. No semifinalists. Winners announced at Awards Ceremony. <u>Delete Semifinal Round.</u> No semifinalists. No presentation. No LEAP Response. Top three winners announced at Awards Ceremony.
REGULATIONS:	<u>Preliminary Round:</u> No change <u>Delete Semifinal Round.</u> No semifinalists. No presentation. No LEAP Response. <i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i>
EVALUATION:	Delete 2. No Semifinal Round. No presentation. No LEAP Response. Evaluation is based on 80 points: <ul style="list-style-type: none"> • Portfolio (30) • Animation (50)

Structural Engineering

On-Site Event

2019 Problem Statement and Forms: <http://www.tsaweb.org/Themes-and-Problems>

OVERVIEW:	<p>All participants bring the following on conference day to be evaluated:</p> <ul style="list-style-type: none"> • Pre-Built Structure • Three-View Drawing • Team Verification Form • Analysis and Assessment Form <p>There is no on-site semifinalist construction problem. All groups are present for testing of their Pre-Built Structures.</p> <p>No semifinalists/finalists. 1st, 2nd and 3rd place winners are announced at Awards Ceremony.</p>
ELIGIBILITY:	1 team of 2 members per chapter
SAFETY EYEWEAR:	Safety eyewear is not needed. There is no on-site construction problem.
TIME LIMITS:	Delete B-C. No semifinalists. No on-site construction problem.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURES/ REGULATIONS:	<p><u>PRE-BUILT STRUCTURE REGULATIONS</u> No change</p> <p><u>PROCEDURE FOR ON-SITE DESTRUCTIVE TESTING OF PRE-BUILT STRUCTURES</u> Delete D-E. No semifinalists. No on-site construction problem.</p> <p><u>REGULATIONS AND PROCEDURE FOR SEMIFINALIST ON-SITE CONSTRUCTION AND DESTRUCTIVE TESTING</u> Delete A-S. No on-site construction problem. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on all parts of student projects.</i></p>
EVALUATION:	Evaluation is based on the compliance and design efficiency of pre-built structure only. No on-site construction problem. No semifinalists. No LEAP Response.

System Control Technology

Static Event

2019 Design Problem will be posted on the NJ TSA website on January 14, 2019

OVERVIEW:	Model is constructed off-site during the school year and submitted on conference day (Static Event). Design problem will be posted on the NJ TSA website on January 14, 2019.
ELIGIBILITY:	2 teams of 3 members per chapter
TIME LIMITS:	Delete 1-3. Model is constructed off-site during the school year and submitted on conference day. Teams will set up their device and leave instructions for evaluators to operate the device.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> Delete 1-7. No LEAP Response. Model is constructed off-site. Inventor's Log is developed off-site. Students set up their device on conference day and leave instructions for evaluators to operate the device. 8. Teams pick up their entries prior to leaving the conference. 9. No semifinalists. Winners are announced at Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No LEAP Response. Top three winners will be announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> A-I. Design problem will be posted on the NJ TSA website on January 14, 2019. Model is constructed off-site. No on-site portion.</p> <p><u>Delete Semifinal Round.</u> No LEAP Response. Top three winners will be announced at Awards Ceremony.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i></p>
EVALUATION:	<p>Delete 4. No LEAP Response. No semifinalists.</p> <p>Evaluation is based on 100 points:</p> <ul style="list-style-type: none"> • Inventor's Log (20) • Solution to Problem (60) • Programming Structure (20)

Tech Bowl On-Site Event

OVERVIEW:	All participants will complete a written exam and then participate in the oral event.
ELIGIBILITY:	1 team of 3 members per chapter
TIME LIMITS:	<u>Preliminary Round:</u> 2. Forty-five (45) minutes is allowed for this test. <u>Delete Semifinal Round.</u> All teams will participate in the oral competition.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Follow procedures listed below. Do not refer to the <i>TSA Competitive Events Guide</i>.</u></p> <ul style="list-style-type: none"> A. Following the written test, team members will report to the oral event area holding room for briefing at the designated time. After briefing, advisors must leave and the team will remain in the holding room until called for competition. Teams may visit with other teams; however, <u>no advisors or visitors</u> may enter the holding room. B. No audience members are permitted into the oral event area. C. When instructed to do so, two (2) teams will enter the event area and be seated according to instructions. D. When a team has been defeated in any round of the oral event, the team is out of the competition. E. Questions will be drawn, as needed, from a card file resource bank. F. A team's total score is derived from the correct answers to the questions asked. For each correct answer, a team will receive ten (10) points. When a question has been completely read and a team is recognized to answer, if the team does not answer or answers incorrectly, five (5) points will be deducted from the team's score. In this instance, the other team does not have the opportunity to respond to this question, and the next question is read for both teams. If is question is being read and a team member presses the button before the question is finished, the member must answer completely as stated on the answer card. If the answer given is incorrect, the entire question will be read for the other team. G. A total of twelve (12) questions will be asked per round. No

	<p>questions will be repeated in another round. In the case of the tie, five (5) additional questions will be asked. This procedure will continue until the tie is broken. The questions will be picked at random from the basic areas tested.</p> <p>H. <u>Bonus Question</u> There will be one additional question (bonus question). The bonus question will be announced, and the team that answers it correctly will have the opportunity to answer one additional question. This is the only time when team members may consult with each other before giving an answer. The team will have ten (10) seconds to give its answer. If a team gives an incorrect answer to the bonus question, then the question will be read to the other team. Bonus point scoring: If a team answers the bonus correctly, that team receives fifteen (15) points; if a team answers the bonus incorrectly, that team loses five (5) points from its score.</p> <p>I. A panel of evaluators will be available to respond to questions concerning acceptable answers.</p> <ol style="list-style-type: none"> 1. Rulings on acceptable answers will be made only during the round in question. 2. Rulings will be made immediately, to do one of the following: <ol style="list-style-type: none"> a. Accept only the answers listed on the card. b. Accept the student's answer and renew points, or remove the question and read another in its place. c. The rulings of the panel will be final.
<p>REGULATIONS:</p>	<p><u>Follow procedures listed below. Do not refer to the <i>TSA Competitive Events Guide</i>.</u></p> <ol style="list-style-type: none"> A. No transmitting or recording devices will be permitted in the event area. No prompting will be permitted. B. The team member who "buzzes in" will have five (5) seconds to answer the question, without discussion. C. The team that answers the bonus question will be allowed ten (10) seconds to discuss the extra question and give an answer. D. After a question is read, the competing teams will have ten (10) seconds to answer. If neither team can answer the question, then another question will be read. E. If a team member "buzzes in" before a question is finished being read, that member must give the exact answer as printed on the card.
<p>EVALUATION:</p>	<p>Evaluation is based on the total points from the three written tests plus the total points from the oral competition. Awards will be given to the top three (3) teams</p>

Technical Design Pre-Conference Event

2019 Design Problem will be posted on the NJ TSA website on February 28, 2019. Entries must be received in the NJ TSA Office (or postmarked) by 5pm on March 5, 2019.

OVERVIEW:	Problem is solved off-site. Design problem will be posted on the NJ TSA website on February 28, 2019. Entries must be received in the NJ TSA Office (or postmarked) by 5pm on March 5, 2019.
ELIGIBILITY:	2 teams of 2 members per chapter
TIME LIMITS:	Participants will be allowed 2 (school) days to solve the engineering design problem. Design problem will be posted on the NJ TSA website on February 28, 2019. Entries must be received in the NJ TSA Office (or postmarked) by 5pm on March 5, 2019.
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1. The design problem will be posted on the NJ TSA website on February 28, 2019 at 5pm. Portfolio must be received in the NJ TSA Office (or postmarked) by 5pm on March 5, 2019. 4. Delete Semifinal Round. No semifinalists. Winners announced at Awards Ceremony.</p> <p><u>Delete Semifinal Round.</u> No Semifinalists. No LEAP Response. Top three winners will be announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No Semifinalists. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i></p>
EVALUATION:	<p>Delete 3. No LEAP Response. No semifinalists.</p> <p>Evaluation is based on 100 points:</p> <ul style="list-style-type: none"> • Solution (100)

Video Game Design Pre-Conference Event

OVERVIEW:	<p>No semifinalists. No on-site interview. Game and all required documentation submitted Pre-Conference.</p> <p>URL for the video game should be emailed to tsachall@tcnj.edu. All required documentation must be submitted as a <u>PDF attachment</u> to the email.</p>
ELIGIBILITY:	<p>1 team of 2-6 members per chapter. No semifinalists. No interview. Entries submitted Pre-Conference.</p>
TIME LIMITS:	<p>1. Change submission date from May 15 to March 21, 2019. Send URL to tsachall@tcnj.edu. Include ID# and "Video Game Design" in subject line.</p> <p>3. Emails will be time stamped and serve as proof of submitting project on time.</p> <p>Delete 4. No semifinalists. No on-site interview.</p> <p>URL for the video game should be emailed to tsachall@tcnj.edu. All required documentation must be submitted as a <u>PDF attachment</u> to the email.</p>
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> 1-2. Entries due on March 21, 2019. URL for the video game should be emailed to tsachall@tcnj.edu. All required documentation must be submitted as a <u>PDF attachment</u> to the email.</p> <p>4. Entries are reviewed by evaluators prior to the NJ State Conference.</p> <p>Delete 5. No semifinalists. No interview. Winners announced at award ceremony.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No interview No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Preliminary Round:</u> H. Entries become the property of NJ TSA.</p>

	<p><u>Delete Semifinal Round.</u> No semifinalists. No interview. No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically assigned an ID#. This number needs to be on student projects.</i></p>
EVALUATION:	<p><u>Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No semifinalist interview No LEAP Response.</p> <p>Evaluation is based on 90 points:</p> <ul style="list-style-type: none"> • Documentation (30) • Game Design (60)

Website Design

Pre-Conference Event

2019 Theme: An Escape from the Ordinary

Design Brief: <http://www.tsaweb.org/Themes-and-Problems>

OVERVIEW:	No semifinalists. No interview. Entries submitted Pre-Conference.
ELIGIBILITY:	1 team of 3-6 members per chapter. No semifinalists. No interview. Entries are submitted Pre-Conference.
TIME LIMITS:	<p>1-2. Change date from May 15 to March 21, 2019. URL must be emailed to tsachall@tcnj.edu. Include ID# and "Website Design" in subject line.</p> <p>4. Emails will be time stamped and serve as proof of submitting project on time.</p> <p>5. All entries will be available to view at the State Conference.</p> <p>Delete 6. No semifinalists. No interview.</p>
LEAP:	No LEAP Response.
ATTIRE:	See Pages 5-6 of this guide for required dress code.
PROCEDURE:	<p><u>Preliminary Round:</u> Delete 5. No LEAP Response. 6. Entries are evaluated prior to the NJ State Conference. Delete 7. No semifinalists. No interview.</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No interview No LEAP Response. Top three winners announced at Awards Ceremony.</p>
REGULATIONS:	<p><u>Pre-conference/Preliminary Round:</u> No change</p> <p><u>Delete Semifinal Round.</u> No semifinalists. No interview No LEAP Response.</p> <p><i>No school or individual names labeled on projects; only ID#'s are to be used. Upon registering students online, they are automatically</i></p>

	<i>assigned an ID#. This number needs to be on all parts of student projects.</i>
EVALUATION:	<u>Preliminary Round:</u> No change <u>Delete Semifinal Round.</u> No semifinalist interview. No LEAP Response. Evaluation based on 90 points: <ul style="list-style-type: none"> • Website development (90)