



Colorado Technology Student Association

2018 Call to Conference & State Competitive Events Guide

Updated 9/22/2017



Contents

From the State Advisor	4
About COTSA	8
State Conference Policies and Procedures	9
National Affiliation	9
State Conference	9
Deadlines	10
Conference Schedule.....	10
Registration.....	10
Forms	11
Hotels.....	11
Attendance at the Conference	14
Competitive Events.....	16
Dress Code	18
Conference Expenses/Liability	19
Student Safety	20
R/C Vehicles/Aircraft	20
Mandatory Reporting.....	20
No Weapons Policy	21
Non-Discrimination Policy.....	22
Refund Policy	22
State Officer Application	23
State Conference Registration	24
Hotel Rooming List.....	28
Hotel Forms	29
Deadlines	35
Fleece for Fighters.....	36
Tops for Tots	37
Judging	38
COTSA Alumni Association.....	39
Website and Social Media	39
Awards and Recognition.....	40
Achievement Awards	40
Chapter Excellence Award	40
Dr. Bob Hanson Distinguished Student Award	40
TSA Technology Honor Society	40
Advisor of the Year.....	41
Dr. Harvey Dean Outstanding Recognition Award.....	41
Distinguished Service Award.....	41
Honorary Life Award.....	41
Distinguished Alumni Award	42
Future STEM Teacher Scholarship	42
William P. Elrod Memorial Scholarship	42



Contents

Johnson & Wales University Scholarship.....	42
Goodheart-Wilcox State Advisor of the Year	42
TSA Star Recognition	42
COTSA Official Forms	43
Instructions for submitting forms	44
Medical Release Form	45
Personal Liability Form	46
Photo/Media Release Form	47
Conference Conduct and Practices Form	48
ACS Contribution Form	49
Documentation Style Guide.....	51
Style Guide Introduction	52
General Guidelines	53
Specific Guidelines	54
The Documentation Portfolio	56
State Competitive Event Rules	69
Catapult Design	70
Chapter Service Project	77
Colorado Statesman	84
Crash Test.....	85
Creativity Challenge – HS	91
Creativity Challenge – MS.....	92
Fashion Design – MS.....	93
Fore!	99
Giant Jenga Tournament	104
Global Logistics	106
Mousetrap Tractor Pull	113
On-Demand Video Challenge – MS.....	117
Pin Design	122
Rat Trap Drag Race	127
Robotic Design	131
Rubber Band Powered Cars.....	138
SeaPerch.....	142
Silent Movie.....	149
T-Shirt Design	157
Theatrical Set Design.....	162
Event Summaries	173
Event Summaries – Middle School	174
Event Summaries – High School.....	188
Early Deadline Events – Middle School	203
Early Deadline Events – High School.....	205
Middle School Event Eligibility	207
High School Event Eligibility.....	209



From the State Advisor

Dear Chapter Advisors:

On behalf of our State Association, I want to welcome you to a new year! Whether this is your first time with the Colorado Technology Student Association or you are an experienced veteran, I'm certain that you'll find a wealth of information in the pages that follow.

Mark Your Calendar!

It's time to mark your calendar for February 22-24, for the 2018 Colorado TSA State Conference at the Marriott Denver Tech Center, 4900 S. Syracuse Street, in Denver. Additional hotel rooms have been reserved at the Hyatt Regency DTC, 7800 E. Tufts Avenue, just diagonally across the street from the Marriott.

Call to Conference

This Call to Conference/State Competitive Event Guide serves several important functions.

First, this guide contains the information regarding the annual State Conference, including hotel rooming information, room rates, conference forms, etc.

Second, this document contains the rules and rubrics for the STATE-ONLY competitive events. These events are developed by Colorado TSA staff in conjunction with advisors as well as business and industry representatives to supplement the national competitive events which are presented in the National TSA Competitive Events Guides. As a reminder, each year, the state-only events are reviewed and revised, and events are added or deleted. Students and advisors should **REVIEW AND CAREFULLY READ ALL THE EVENT GUIDELINES AND SPECIFICATIONS! DO NOT ASSUME THE RULES ARE THE SAME AS PREVIOUS YEARS!** No one wants to see projects disqualified because a student was following out-of-date rules.

Summaries of each of the events, both national and state-only, are included at the back of this guide. Please consult the latest TSA competitive events guides for more detailed descriptions and information. If you are unsure whether you have the latest guide, please contact me. Updates and clarifications for national events are made periodically throughout the year and are posted online at the national TSA website at <http://www.tsaweb.org/Updates-and-Clarification>. Please visit this website often to stay on top of updates and clarifications for all national events.

There are also several versions of the Call to Conference – each one geared to a specific stakeholder in the organization – one is for chapter advisors, one is for students, and one is for parents.

- **ADVISOR EDITION** – This is the most comprehensive of the three versions. It contains all the official conference forms (including hotel reservation forms, medical release, code of conduct forms, etc.), chapter deadline information, competitive event rules for the state-only events, as well as links to the update page, and a copy of the COTSA Documentation Style Guide.
- **STUDENT EDITION** – This edition contains information **STUDENTS** need for the state conference including competitive event rules for the state-only events as well as links to the update page, and the COTSA Documentation Style Guide.



- **PARENT EDITION** – This edition contains information on the conference PARENTS need to know, including where and when to pick up students from the conference and the forms they will need to complete for COTSA.

Please share these versions with students and parents – it will help answer a lot of questions before they are even asked.

What's New?

In the summer of 2017, the National Competitive Event Guide for *Middle School* was revised. Several national level events were revised, a couple events were deleted entirely, and new events were added to take their place. At the state level, the rules were updated/revised to adjust for changes in national-level events. There were a couple of changes to the lineup at the state level, including the retirement of Integrated Autonomous Vehicle, and the addition of Global Manufacturing for high school and the Colorado Statesman for both middle and high school. I invite you to examine these new events and encourage your students to participate.

Fleece for Fighters

The ever-popular community service project Fleece for Fighters is now entering its third year. So far, Colorado TSA has been able to donate nearly 700 fleece blankets to children in need at Children's Hospital and the Ronald McDonald House. Instructions on how to participate in the Fleece for Fighters project (both with blankets and with monetary donations) is located later in this guide. Chapters can copy and circulate the flyer to their local communities (which we highly encourage). The chapter that donates the most blankets will be recognized at the state conference.

LEAP - Leadership. Education. Achievement. Personal Growth.

Last year, National TSA unveiled its leadership program called LEAP, which stands for "Leadership. Education. Achievement. Personal Growth." The purpose of LEAP is to encourage students to be the best member they can be as they seek knowledge about themselves, the organization, and their community, while demonstrating leadership. As a customized program specifically developed for TSA, LEAP brings to life the TSA motto, creed, and mission statement.

Inherent in LEAP's "Be. Know. Do" criteria are the five practices described in the Student Leadership Challenge:

- Model the Way (clarify values and set an example for others)
- Inspire a Shared Vision (enlist others to get involved in an activity based on a common goal)
- Challenge the Process (look for innovate ways to improve)
- Enable Others to Act (facilitate relationships and foster collaboration)
- Encourage the Heart (recognize contributions of others and create a spirit of community)

To realize the impact the five practices can have on the development of student leadership, LEAP was integrated into each high school competitive event. This year, 2017-2018, LEAP extends to the middle school level and ALL students will be required to complete LEAP documentation related to their competitive events



- including state-only events. Semifinalists for events will be required to address the LEAP components and how they address the leadership skills developed or enhanced as a result of participation in the event. For those events at the state conference which do not have semifinal rounds, the LEAP documentation will be reviewed during the evaluation process, so it's critical the LEAP documents are as complete as possible. For more details, please consult the national competitive event guides, or visit: www.tsaweb.org/LEAP-competition-engagement.

Throughout this school year, the COTSA State Office will be providing chapters with resources on LEAP, how to integrate it into their programs, as well as information as to how it fits into competitive events. Please watch your email and the COTSA website (www.cotsa.cccs.edu) for more information.

Documentation Style Guide

Included in the Call to Conference is the Colorado TSA Documentation Style Guide. It is highly encouraged and recommended that students use the guide to create their project documentation. The guide is a valuable tool for preparing documentation so it meets TSA guidelines – both national and state – and helps ensure student projects are not disqualified because of an improperly formatted portfolio.

State Officer Outreach

The COTSA State Officer team wants you and your students to know they are always available to assist chapters! Chapter advisors are asked to provide the name and email of their chapter president so the state officer team can make personal contact with them. Additionally, if you would like the state officers to visit your chapter - for a kickoff event, a local competition, or even for a goodwill visit - please schedule a state officer visit by visiting the COTSA website at www.cotsa.cccs.edu and click on "Schedule A State Officer Visit."

Social Media

TSA members and advisors are encouraged to interact with each other and the state officers via social media. Please join Colorado TSA on Facebook and Twitter to get all the latest news and updates (Twitter: *Colorado TSA*; Facebook: *Colorado Technology Student Association*; and Instagram: *colorado_tsa*). Please share your chapter's stories and pictures - we love to see what you're doing!

And don't forget to visit the COTSA web page for news, updates, and resources: www.cotsa.cccs.edu.

I wish you the best of luck this year and look forward to working with all of you. If you have any questions or comments, please feel free to contact me at (720) 858-2794 or via email at: tony.raymond@cccs.edu.

Best regards,

A handwritten signature in black ink that reads "Tony Raymond". The signature is written in a cursive, flowing style.

Tony Raymond
COTSA State Advisor

An abstract graphic consisting of several overlapping, flowing shapes in shades of blue and cyan. The shapes create a sense of movement and depth, with some areas appearing more saturated and others more translucent. The overall effect is modern and dynamic.

**2018
Call to Conference &
State Competitive
Events Guide**



About COTSA

The Colorado Technology Student Association is a national non-profit national organization of students engaged in science, technology, engineering, art and mathematics (STEAM). Open to students enrolled in or who have completed technology education courses, TSA's membership includes more than 250,000 middle and high school students in approximately 2,500 schools spanning 49 states. TSA is supported by educators, parents and business leaders who believe in the need for a technologically literate society. Members learn through exciting competitive events, leadership opportunities and much more. The diversity of activities makes TSA a positive experience for every student. From engineers to business managers, our alumni credit TSA with a positive influence on their lives.

TSA chapters take the study of STEAM (science, technology, engineering, art, and mathematics) beyond the classroom and give students the chance to pursue academic challenges among friends with similar goals and interests. Together, chapter members work on competitive events, attend conferences on the state and national levels and have a good time raising funds to get there. Chapter organization develops leadership, as members may become officers within their state and then run nationally. Our chapters are committed to a national service project and are among the most service-oriented groups in the community.

Our state association, the Colorado Technology Student Association (COTSA) has been dedicated to developing leadership and personal growth in students for more than 30 years. At the state level, we are guided by a dedicated group of community, business and industry leaders, teachers, and administrators who are dedicated to ensuring that our students receive the best possible experience as a result of their involvement in TSA.

For more information about TSA or the Colorado Association, please visit the national website at <http://www.tsaweb.org> or the state website at <http://www.cotsa.cccs.edu> or contact the COTSA State Advisor, Mr. Tony Raymond, at 720-858-2794 or via email at tony.raymond@cccs.edu.





State Conference - Policies and Procedures

The Colorado Technology Student Association is managed by the Colorado TSA State Advisor with assistance from the COTSA Advisory Committee under the oversight of the Colorado Community College System and its policies regarding Career and Technical Student Organizations.

What follows is a list of procedures for affiliating a chapter and registering/participating in the annual Colorado TSA State Conference, as well as policies governing the state association.

National Affiliation

All students and advisors wishing to become members of TSA must first affiliate a chapter with National TSA. The affiliation process is detailed on the national TSA website at <http://www.tsaweb.org/Affiliation-and-Dues>. In order to compete in events at the state conference, a chapter must be affiliated with the national office no later than January 1, 2018! Chapters and individuals not registered (with all documentation completed and both state and national dues paid) with National TSA will not be allowed to compete at the state conference. Chapters **MUST** affiliate with National TSA in order to receive the official TSA Competitive Events Guide for either middle or high school.

State Conference

Each year, Colorado TSA holds an annual statewide conference which brings student members together with business, industry, and community leaders in a competitive showcase that recognizes both technological skill and leadership development. The conference includes the annual business meeting, election of officers, student competitive events, and a recognition ceremony.

This Call to Conference and State Competitive events guide contains the information a chapter needs to prepare for this year's state conference, including outlines of all of the national events for both middle and high school as well as the rules for the state-only contests which have been developed specifically for students in grades 6-12 (and in some cases even for elementary students) by experienced technology education teachers within Colorado.

This year's state conference will be held February 23-25, 2017 at the Marriott Denver Tech Center, 4900 S. Syracuse, Denver, CO 80237. Additional sleeping rooms are available through the Hyatt Regency Denver Tech Center, 7800 E. Tufts, Avenue, Denver, CO 80237.

The theme for competitive events at the State Conference this year will be: "A Celebration of Success", the same as the TSA National Conference. Competitive event themes are posted on the national website at: <http://www.tsaweb.org/Themes-and-Problems>.



State Conference - Policies and Procedures

Deadlines

Please make note of all the deadlines listed in this Call to Conference. There is no flexibility with any posted deadlines and there are no exceptions! Failure to meet stated deadlines may prevent a chapter from participating in the state or national conferences.

Conference Schedule

The annual state conference schedule will be posted on the Colorado TSA website when it is available. However, the schedule is subject to change and only the final printed schedule announced at the conference shall be the schedule the conference adheres to. The conference starts at 9:00 a.m. on Thursday, February 22 and runs until Saturday, February 24 at approximately 2:00 p.m.

Hotel rooms may not be available for check-in until later in the day on the 22nd. However, arrangements have been made at the hotels for luggage storage until rooms are available.

There are two opening sessions: one for high school and one for middle school. The opening session is **mandatory** as important TSA business will be discussed and announcements given. Advisors need to ensure their chapters are on time and seated for the opening session.

After the second opening session, the state officer candidates will be available for a “meet and greet.” TSA chapter members should visit with the candidates to help determine for whom they will vote. On Thursday evening, chapters should vote on any pending business and officer candidates and should return their ballots to conference headquarters by the stated deadline.

There are also two closing/award ceremonies on Saturday: one for high school and one for middle school. During the high school awards ceremony, it is recommended that middle school chapters pick up projects and check out of the hotel so they can leave as soon as their award ceremony is finished. During the middle school awards ceremony, it is recommended that high school chapters pick up their projects and check out of hotel rooms if they have not already done so.

Registration

School chapters must be an affiliated member of National TSA and Colorado TSA in order to participate and/or compete in the state conference, with the exception of those students solely participating in TEAMS or as part of the SeaPerch competition. For those specific events, please consult the event rules. Chapter affiliation must be completed online at <http://www.tsaweb.org/> prior to January 1, 2018 in order to be eligible for the state conference. Schools not affiliated by the January 1 deadline are not eligible to participate in the state conference.

Everyone who attends the Colorado TSA State Conference must register, including parents and any other guests. Throughout the conference, volunteers assist with registration by checking name badges of all attendees at the entrance to the general sessions, the competitive events and other activities. There will be no admittance to any event without a name badge, including the award ceremony.



State Conference - Policies and Procedures

Advisors and their chapters must pre-register for the conference. By submitting the registration, the school and the advisor registered accept financial responsibility for the amount shown on the invoice generated at registration. If a chapter is unable attend, please refer to the refund policy below. Complimentary registration is granted only to national TSA officers, honorary life members, national and state TSA staff, selected special interest session presenters, selected invited guests (keynote speaker, government officials, etc.) and approved national TSA contest managers and coordinators. Students may not register on site for competitive events.

Colorado TSA endeavors to meet all special needs requests (i.e., dietary restrictions, wheel chair access, interpreters, etc.). Advisors must enter any special needs requests at the time of registration. In cases where an interpreter is needed, the cost of and arrangements for an interpreter is the responsibility of the chapter/school/district. Hotel accommodations for the interpreter(s) are the responsibility of the student/school/district. Interpreters will receive complimentary conference registration.

Forms

Included in this document are the forms required by Colorado TSA and the hotels for participation in the state conference. ALL conference attendees are required to complete these forms. Once the forms have been completed and returned to the chapter advisor, they must be submitted **IN PDF FORMAT** to the state office via the Forms Upload website. **DO NOT SEND PAPER COPIES** to the state office! NOTE: If a chapter's paperwork and/or payment are not received by the deadlines stated in this document, **THE CHAPTER WILL NOT BE ALLOWED TO PARTICIPATE IN THE CONFERENCE!** It takes time to process checks and get forms back, so please PLAN AHEAD!!!

Hotels

Colorado TSA has made arrangements with both the Marriott Denver Technology Center and the Hyatt Denver Technology Center for hotel rooms for conference attendees. All hotel reservations will go through the Colorado TSA State Office, but payment will be made directly from the chapters to the hotel. Please refer to the Hotel Reservations section in this guide for more information. Do NOT make your reservations directly with the hotel.

Priority for room reservations at the Marriott will be given to middle school chapters first, then to schools with middle and high school chapter combinations next, and then, finally to high schools. Any overflow will be assigned to the Hyatt. Rooms are assigned by the hotels based on their rooming availability and configuration; though a school may request the Marriott, depending on the above stated priority and availability, that request may not be able to be fulfilled.



State Conference - Policies and Procedures

Staying at the Hotel

It is the expectation of Colorado TSA that all chapters stay at one of the conference hotels. However, there are a number of things that may impact a chapter negatively should they choose NOT to stay at the conference hotel:

- 1) **Safety and Liability** - In February, the weather can be unpredictable. To transport students to and from the hotel can be hazardous if the weather is bad. Should the weather become an issue, transporting students becomes a significant liability to the advisor, the school, and the district. Additionally, should the weather prevent a student from returning to the conference after having gone home, per Colorado TSA policy, there are no refunds for conference registration. It is preferred that chapters err on the side of caution - and student safety - when thinking about commuting and opt instead for staying at the conference venue.
- 2) **Time Management** - There are several events that happen late at night on Thursday and Friday (until midnight). If the students have to travel home AFTER that, and then get back to the conference hotel by 7:00 a.m., that makes for a VERY short night for both them and their parents. It also puts quite the burden on either the advisor and/or school to arrange late/early transportation (a bus & driver, not to mention paying for it) or it will fall to parents. And while some parents would do that, the time spent on the road would be better spent resting at the hotel.
- 3) **Cost** - There are a number of costs associated with traveling to and from the conference.

Transportation

Schools either have to pay for buses to come and go picking up and taking home students, which can be costly when the cost of the driver is calculated in. It also becomes a matter of scheduling - some districts can't run buses as early as 7:00 a.m. to extra activities because they are on the routes to get the kids to school. If parents drive to and from, then they take on the burden of the cost, even if it is just down the street.

Hotel/Conference Space

Colorado TSA has done extensive research and chooses the site of the state conference very carefully. On multiple occasions, COTSA staff has examined venue options, taking into account convenience of locations, need for and availability of adequate meeting spaces, as well as the needs of attendees as individuals.

Everyone enjoys meeting in a comfortable conference venue, offering quality service and support for our competitive events, workshops, and general sessions. In exchange for guaranteeing those services and support for the annual State Conference, Colorado TSA must guarantee a number of attendees will stay at the conference hotel(s). The hotel then offers a discounted room rate for conference attendees which is negotiated based on the number of expected attendees and the meeting space required to comfortably accommodate them. It is a complex negotiation process to get the meeting room space, food, and sleeping rooms at a cost that provides the most value



State Conference - Policies and Procedures

per dollar for the conference and those attending it. Even if the conference does not meet the contracted sleeping room commitment, the hotel will still receive payment, which means that unfilled rooms can cost Colorado TSA thousands of dollars. That cost, then, not only negatively impacts the current year's conference, but also future conferences since it becomes difficult to negotiate a beneficial a hotel contract for future years. The result: higher registration fees to attend the conference.

So what happens if Colorado TSA doesn't contract for sleeping rooms at all? Two things. First, those conference attendees who choose to stay or have to stay because of the distance of travel to the state conference will end up paying more per room per night to stay at the conference hotel. Second, Colorado TSA would also incur additional expenses for meeting room rental fees and service costs (including food and A/V), which can be quite costly. Third, if there were no sleeping room contract, the hotel would not hold a block of rooms for attendees; in that case, some chapters could find themselves a considerable distance from the conference venue. In the final analysis, not staying at the conference hotel will end up costing everyone more to attend -- either in room rates or in conference registration fees.

TSA is one of the more affordable student organizations when it comes to hotel and registration fees, and it is the determination of the advisory committee and state advisor that it stay that way. By having the students stay at the conference hotel, the costs to the association as a whole are greatly reduced, thereby keeping conference costs as low as possible.

- 4) **Level Playing Field** – There are two schools of thought on this: On the one hand, it provides an advantage to those individuals who go home – they have access to all their resources at home/school that those who are staying at the hotel do not, including their own bed, etc. On the other hand, it can be a disadvantage to those who go home – they spend very little time at home sleeping, spend a lot of time on the road traveling, are more stressed because they have to ensure they allow for enough travel time so they don't miss out on conference activities and competitions. In either case, in order to create a fair and level playing field for all, it's best to have a chapter's members stay at one of the conference hotels.
- 5) **Social Aspect** – In addition to many events running late on Thursday and Friday, there is the important aspect of being with other TSA members and learning from/with them. We understand this; that's why social activities are planned during the evening hours on Thursday and Friday. If students go home, they miss out on this great opportunity.
- 6) **Security** – While Colorado TSA provides for security during the conference, the ultimate responsibility for the safety and security of the student lies with the advisor and his/her school/district. When students stay at the conference hotel, the advisors do not have to worry about students in transport to and from conference events, especially during times of inclement weather; they **KNOW** where their students are and can account for them the entire time of the conference.



State Conference - Policies and Procedures

Attendance at the Conference

Colorado TSA requires a minimum of one (1) adult advisor or chaperone for no more than ten (10) student participants. All adult advisors and/or chaperones must register for the conference, pay the registration fee, and be in attendance for the duration of the conference. There are no restrictions on the number of adult advisors and chaperones who may attend. All teachers, parents, supervisors and teacher-educators are eligible to serve in this capacity.

All adults, including parents, must register for the conference. No student may attend, compete, or participate without physical presence of an adult chaperone throughout the duration of the conference.

Parent/Guardian Conference Attendance

Colorado TSA understands the importance and value of parents/guardians to our members and appreciates their encouragement, enthusiasm and support. However, with the growth Colorado TSA has experienced, there is no longer any capacity or facilities to accommodate those parents/family members of student attendees who come to the state conference as observers. For the safety of our students, volunteers, COTSA staff and hotel staff, **access to all TSA events is restricted to officially registered and badged conference participants ONLY**. Any individual who is not an officially registered participant of the conference WILL NOT be admitted to any TSA event at the conference hotel (see the section on registration). COTSA staff understand that families do come to pick up students after the awards ceremonies to help chapters save money on transportation costs, and that is acceptable. However, unless they are registered participants of the conference, parents and family members may not attend the awards ceremonies, nor can they wait for students in the lobby, restaurant or atrium areas of the hotel. Instead, they must wait outside the hotel in the hotel parking lot in designated parking spaces. They cannot wait in the hotel loading zones or fire lanes. COTSA staff regrets these measures, but Colorado TSA members are guests of the Marriott and Hyatt and need to be respectful of their facilities and their other guests, as well as comply with local fire codes and laws.

Student Conference Attendance

In order to attend and/or compete at the Colorado TSA State Conference, all students, including students who are 18 years of age, are required to attend the conference with an advisor, parent or adult chaperone.

Each TSA member must meet the criteria listed below to be eligible to attend the state conference:

- Be a current member in good standing with TSA. Membership must be on record with the national office.
- Have the approval of the TSA chapter and the school administration.
- Have completed all required forms, including Personal Liability and Media Releases, which require parent/guardian signature.
- Be in attendance throughout the duration of the state conference.



State Conference - Policies and Procedures

Attendees of the Colorado TSA State Conference must complete a Conference Conduct and Practices Agreement which indicates their agreement to abide by the conference practices listed below. Attendees (adult and student) violating any of the conduct and practices will subject not only themselves, but their entire chapter to being removed from the conference and/or disqualified from competition without refund. Colorado TSA reserves the right to dismiss any attendee (adult or student) from the conference for inappropriate actions.

Conduct and Practices

- The term “attendee” shall mean any student or adult attending the conference and taking part in its activities.
- Identification badges must be worn at all times by persons in conference attendance.
- There shall be no defacing of public property. Any damages to the property or furnishings in the hotel rooms or buildings must be paid by the individual(s) or school(s) responsible.
- Attendees shall keep their advisors informed of their activities and/or whereabouts at all times.
- Attendees should be prompt and prepared for all activities.
- Attendees should be financially prepared for all possibilities.
- No attendee shall remain in the sleeping room of the opposite gender unless the door is open at all times.
- No attendee shall remain in the sleeping room of the opposite gender past curfew.
- No conference attendee shall possess any alcoholic beverages, narcotics, or firearms, in any form at any time, under any circumstances. (See No Weapons Policy under Policies and Procedures on page 21.)
- Smoking is not permitted.
- No attendee shall leave the conference hotel (except for authorized events) unless permission has been received from their chapter advisor(s).
- Attendees are required to attend all general sessions and activities assigned, including workshops, all general sessions, competitive events, committee meetings, etc., for which they are registered, unless engaged in some specific assignment taking place at the same time.
- Chapter advisors will be responsible for their attendees’ conduct.
- Attendees violating any of the conduct rules will subject their entire delegation to being removed from the conference or disqualified from competition.
- To provide a safe environment for minors, it is the policy of Colorado TSA that a minimum of two adults supervise or be in attendance with minors during any organization-related activity. The purpose is to avoid one-on-one interactions between adults and minors that are not easily observable by others. During competitive events, there should be a minimum of two adults in the room; judges are not to be left in a one-on-one situation with students.
- The State Advisor and staff of Colorado TSA reserves the right to dismiss any attendee (adult or student) from the conference for inappropriate actions, or a violation of these conduct and practices.



State Conference - Policies and Procedures

Competitive Events

During the summer of 2017, the National Middle School Competitive Event guide underwent revision. Several events were eliminated or combined with other events while others were updated/revised. Advisors and students need to review ALL of the competitive event rules thoroughly. AND...both advisors and students are advised to check the rules and updates section of the national website for any rule clarifications and updates. The clarifications and updates may be found here: <http://www.tsaweb.org/Updates-and-Clarification>. Students may be disqualified if they do not follow the most current iteration of the rules.

Participation in Events

TSA members, advisors and chapters must be currently affiliated with TSA to enter any competitive event. The TSA competitive event limit is six (6) events per conference participant, individual and team events combined. When it comes to team events all team members must be affiliated with the same chapter, and unless otherwise designated in a competition's eligibility guidelines, the maximum team size is six (6) members.

It is the individual responsibility of each participant to obtain all rules and guidelines for competitive events. Lack of knowledge or understanding about a particular event is neither reason nor excuse for an individual to request an accommodating adjustment or change. Students and advisors should routinely check the TSA website <http://www.tsaweb.org> for updated information about TSA general rules and competitive event guidelines. Students who participate in any TSA competitive event are responsible for knowing all rules, updates, changes, and clarifications related to that event.

Colorado TSA and National TSA provide guidelines for individual and team entry content, but neither Colorado TSA nor National TSA bear any responsibility for the content choices made by participants. Competition entries or presentations by participants must not include racial or ethnic slurs/symbols, reference to gang affiliation, or vulgar, violent, subversive or sexually suggestive language or images. Entries or presentations should not promote products that students may not legally buy, such as tobacco, alcohol, or illegal drugs. Images of guns, knives or other weapons are discouraged. Failure to follow these guidelines results in disqualification.

Early Submission

Many events have an EARLY SUBMISSION deadline of February 1, 2018. Early submission events are to be submitted via the online system. Please refer to the Eligibility Charts later in this guide for more information on which events have Early Submit requirements and what those requirements are. Before students can submit materials, they will need to have their state conference ID number which means they must be registered for the state conference.

Electronic Devices

Recording devices are not allowed in certain competitive events. The Judging Coordinator and Event Coordinator approval is required before any event may be recorded. All electronic devices, including but not limited to, cell phones, iPads/tablets, electronic readers, MP3 players/iPods, smart watches, etc., must be turned off unless otherwise noted in specific event regulations.



State Conference - Policies and Procedures

Written Testing

All written testing will be completed using an online testing system. Students competing in events that require a written test are required to provide their own laptop or tablet (not cell phone) to take the test(s). The laptop/tablet must be Wi-Fi capable; no hardwire connections are provided. Contestants will be given instructions and a code to log into the testing site. Students will need to report to the testing room during the designated testing window to take the test. They will also be required to surrender their cell phones for the duration of the test and retrieve them at the end of the testing session.

Contest Scores

Judges, at their discretion, may refuse to grant an award for a competition if the entries were deemed to be of inadequate quality. All events are judged in accordance with the stated event criteria as noted in the state and national competitive events guides. The decisions of judges related to competitive events are final.

Colorado TSA has the right to review contest scores and confer duplicate awards if indicated. In such a case, the award placement will be considered a tie, with the tiebreaker going to the award winner announced at the state conference.

Concern about any event during the state conference should be submitted in writing to the Judging Coordinators. The Judging Coordinators will render a decision at the conference, and their decisions are final.

Judges

Each chapter in attendance at the State Conference is **required** to provide a minimum of one (1) judge per 10 students. It is preferred that the judges NOT be chapter advisors, but rather key stakeholders in each chapter's community – school administrators, school district officials, community leaders, advisory committee members or parents/guardians.

High School advisors cannot judge high school events/projects; the same holds true for middle school advisors. Only with the permission of the judging coordinators and the state advisor will such a case be allowed. If a parent or guardian volunteers to judge, they will not be allowed to judge a competition in which the chapter with which they are affiliated is competing or in which they personally have a student contestant. Should a situation such as this inadvertently arise, the judge is to notify the judging coordinator immediately request reassignment. Once a chapter has identified their required number of designated judge(s), the judges should register as a judge on the state conference registration website and select which event(s) they would be willing to judge.

There is no cost for the judges to register as a judge; however, if the judge is also a chaperone or serves in any capacity beyond that of a judge for a chapter, they must register for the conference (see the section on registration).



State Conference - Policies and Procedures

Dress Code

Chapter and state advisors, parents, and chaperones are responsible for seeing that all TSA student members wear TSA competition, general session, or casual attire as occasions may require. Official TSA attire may be purchased online via the SHOP tab on the TSA website at www.tsaweb.org. TSA competition, general session, and casual attire are considered appropriate dress for conference activities and public appearances. Since adults (advisors, parents, and guests) serve as role models at TSA conferences and activities, they are expected to dress appropriately for all TSA occasions they attend. Students must adhere to the TSA dress code requirements as shown in the illustration.

Student members must wear official TSA attire (with either the official royal blue dress shirt/blouse, or a button-down white dress shirt/blouse), professional TSA attire, or business casual TSA attire as indicated in the national or state competitive events guides. Please note that the use of a white dress shirt in lieu of the official royal blue shirt is an exception made at the state conference only. It is the expectation and is **REQUIRED** that students attending the NATIONAL CONFERENCE purchase the official royal blue uniform shirt to be in compliance with national official uniform requirements.

Flip-flops, athletic shoes (tennis shoes, running shoes, etc.), army boots, combat boots or work boots are not permitted. Halter tops, tank tops and shorts are also not permitted. Hats are not to be worn at any time during the conference. All attendees **MUST** wear their name badges at all times.

COMPETITION ATTIRE

- Shirt or blouse: official TSA shirt (royal blue)
- Pants or skirt: gray
- Socks: black or dark blue (males only)
- Shoes: black dress shoes (unacceptable: athletic shoes, army boots, combat, or work boots)
- Sandals: females only may wear black open-toe shoes or sandals

Required for middle school or high school level Chapter Team only, but may be worn for other competitions if preferred by contestant:

- Blazer: navy blue with official TSA patch
- Tie: scarlet red imprinted with official TSA logo (males only)

GENERAL SESSION ATTIRE

- Shirt or blouse: button-up shirt with a turned down collar or a polo/golf shirt; however, the official TSA shirt (royal blue) is preferred
- Dress skirt or pants: (unacceptable: jeans, baggy pants, exterior pocket pants, shorts)
- Socks: black or dark blue (males only)
- Shoes: dress shoes or dress boots (unacceptable: athletic shoes, combat, or work boots); females only may wear open-toe shoes or sandals

CASUAL ATTIRE

- Same as general session attire, OR appropriate t-shirts, shorts, or jeans.

Registrants must wear conference identification badges at all times.



State Conference - Policies and Procedures

For Chapter Team only, at both the middle school and high school levels, competitors also must wear a navy blue blazer with an official TSA patch; males (only) must wear the official TSA logo neck tie. For the state conference, the teams may wear either the official blue shirt, or the white shirt, but all members of the team must all have the same color shirt.

Refer to the attire requirements as listed in the competitive event guides for event-specific attire. Students are always allowed to dress MORE formally than specified for conference activities, and students dressed LESS formally than specified for an event in which they are competing will be allowed to compete but will be assessed a penalty of twenty percent (20%) of the total possible points.

Conference Expenses/Liability

Colorado TSA is a non-profit organization. The conference registration fees are predetermined based upon an analysis of all expenditures necessary to make the state TSA conference a worthwhile and positive experience for all who attend. Conference registration fees cover various expense categories, including conference supplies such as ID badges, programs, conference awards (plaques, medals, pins, etc.); conference special events, facilities (convention center, meeting rooms); and other related expenses such as insurance and security.

The cost of transporting projects to and from the state conference is the responsibility of the individual school, its designated teachers, and their students. Colorado TSA will not be held responsible for any damage, loss, or theft before, during, or after the conference. It is the responsibility of the students to claim any projects after competition at the designated time; any projects not claimed by the close the of the conference will be disposed of.

Colorado TSA is not responsible or liable for any personal property, equipment, or materials brought to the State Conference for use by a participant or attendee.



State Conference - Policies and Procedures

Student Safety

Student safety is of utmost concern to Colorado TSA. Therefore, advisors are urged to ensure that students have all the proper safety equipment, including safety glasses, tools and materials they need to compete successfully and safely. Please refer to the rules in the competitive event guides for specific details. If students do not have the proper safety equipment, they will not be allowed to compete in the event.

R/C Vehicles/Aircraft

For the safety and security of all conference attendees and other hotel guests, NO RC aircraft (e.g., drones) or RC vehicles (other than those specifically turned in as part of a competition) of any kind will be allowed at the hotel. Please leave these items at home.

Mandatory Reporting

Colorado TSA follows the Mandatory Reporting Law for Colorado and is obligated to report any known or suspected child abuse or neglect. The statute states:

Professionals Required to Report Rev. Stat. § 19-3-304

Persons required to report include:

- Physicians, surgeons, physicians in training, child health associates, medical examiners, coroners, dentists, osteopaths, optometrists, chiropractors, podiatrists, nurses, hospital personnel, dental hygienists, physical therapists, pharmacists, or registered dietitians
- Public or private school officials or employees
- Social workers, Christian Science practitioners, mental health professionals, psychologists, professional counselors, and marriage and family therapists
- Veterinarians, peace officers, firefighters, or victim's advocates
- Commercial film and photographic print processors
- Counselors, marriage and family therapists, or psychotherapists
- Clergy members, including priests; rabbis; duly ordained, commissioned, or licensed ministers of a church; members of religious orders; or recognized leaders of any religious bodies
- Workers in the State Department of Human Services
- Juvenile parole and probation officers
- Child and family investigators
- Officers and agents of the State Bureau of Animal Protection and animal control officers
- The child protection ombudsman
- Educators providing services through a Federal special supplemental nutrition program for women, infants, and children, as provided for in 42 U.S.C. § 1786
- Directors, coaches, assistant coaches, or athletic program personnel employed by private sports organizations or programs
- Persons registered as psychologist candidates, marriage and family therapist candidates or licensed professional counselor candidates
- Emergency medical service providers



State Conference - Policies and Procedures

Reporting by Other Persons Rev. Stat. § 19-3-304

Any other person may report known or suspected child abuse or neglect.

Standards for Making a Report Rev. Stat. § 19-3-304

A report is required when:

- A mandated reporter has reasonable cause to know or suspect child abuse or neglect.
- A reporter has observed a child being subjected to circumstances or conditions that would reasonably result in abuse or neglect.
- Commercial film and photographic print processors have knowledge of or observe any film, photograph, videotape, negative, or slide depicting a child engaged in an act of sexual conduct.

Privileged Communications Rev. Stat. §§ 19-3-304; 19-3-311

The clergy-penitent privilege is permitted. The physician-patient, psychologist-client, and husband-wife privileges are not allowed as grounds for failing to report.

Inclusion of Reporter's Name in Report Rev. Stat. § 19-3-307

The report shall include the name, address, and occupation of the person making the report.

Disclosure of Reporter Identity Rev. Stat. § 19-1-307

The identity of the reporter shall be protected.

No Weapons Policy

Colorado TSA has a strict no weapons policy. The term “weapons” includes any pistol, revolver, shotgun, machine gun, rifle or other firearm, BB or pellet gun, Taser or stun gun, bomb, grenade, mine or other explosive or incendiary device, ammunition, archery equipment, dagger, stiletto, switchblade knife, or knife having a blade exceeding four (4) inches in length.

The Colorado TSA conference is a private event and attending participants (including, but not limited to staff, advisors, chaperones, student members, volunteers and judges) are not permitted to carry weapons of any kind, including concealed or displayed firearms, onto the premises of any official Colorado TSA event for any reason. Colorado TSA reserves the right to require participants who violate this policy to immediately leave the premises of any official Colorado TSA event. Colorado TSA also reserves the right to revoke the credentials of such participants without refund of any registration fees. Each participant agrees that this policy is in force, and agrees to comply with this policy, regardless of whether or not signs prohibiting weapons are posted at the premises of any official Colorado TSA event.



State Conference - Policies and Procedures

Non-Discrimination Policy

The Colorado Technology Student Association does not and shall not discriminate on the basis of race, color, religion (creed), gender, gender expression, age, national origin (ancestry), disability, marital status, sexual orientation, or military status, in any of its activities or operations. These activities include, but are not limited to, hiring and firing of staff, selection of volunteers and vendors, and provision of services. We are committed to providing an inclusive and welcoming environment for all members of our staff, clients, volunteers, subcontractors, vendors, and clients.

Refund Policy

Colorado TSA conference registration refunds are granted only to those who provide a written refund request received by the state office before the close of registration. The fee for cancellation is 50% of registration. All refund payments are mailed after the conference and the 50% cancellation fee is deducted accordingly. After registration has closed, no refunds will be issued, even in the event of inclement weather.

In addition to educating students about technology and its role in our global society, TSA strives to prepare the youth of today for the world of tomorrow by providing various leadership training and development opportunities for its members.

Colorado TSA encourages its members to take an active role in the organization by becoming a State Officer! State Officers are critical elements to our association. Receiving extensive leadership training, the State Officers serve as ambassadors for our organization and make frequent visits to schools promoting TSA. They are also integral to the planning, preparation and execution of the Fall and State conferences.



State Officer Application

If a student is interested in becoming a state officer, they must complete and submit the state officer application packet which is available on the Colorado TSA website (www.cotsa.cccs.edu under *For Students*). Candidates do not have to have held a chapter office prior to running for state office; however, all candidates must demonstrate a leadership experience that can be verified and addressed by their chapter advisor (e.g., Boy/Girl Scouts, youth groups, etc.).

All packets (including applications, letters of recommendation, and any required documentation) must be received in their entirety by 11:59 p.m. on February 1, 2018 to be considered. Any applications that are not complete will not be considered for candidacy. Recommendation letters/forms that are required from an adult must be sent directly from the adult's own email account (not scanned as PDFs and sent from the student's email account). Documents not sent from the proper email addresses will be rejected and the state officer application will not be accepted. The completed application packet should be sent to: Dr. Myka Raymond, State Officer Team Advisor, at myka.raymond@gmail.com, with the subject line "2018 State Officer Application."

Students who are interested in becoming state officers must:

- Have good academic standing within their school
- Have attended at least one COTSA state conference (even as a middle school student)
- Attend a MANDATORY meeting for all candidates on Monday, February 5, 2018. All candidates must attend this meeting in order to run for office. At least one parent/guardian for each candidate must also attend the meeting.
- Be available to attend:
 - ▶ Monthly meetings throughout the year
 - ▶ State Officer Training in March/April 2018
 - ▶ The National TSA Conference in June 2018
 - ▶ The CACTE Summer Conference in July 2018
 - ▶ The Fall Leadership Conference in the Fall of 2018
 - ▶ The 2019 COTSA State Conference
 - ▶ Chapter visits as necessary

For more information contact Dr. Myka Raymond, COTSA State Officer Advisor at myka.raymond@gmail.com.



State Conference Registration

In order to register for the Colorado TSA State Conference, AN ADVISOR must affiliate the chapter with National TSA via the National TSA website (<http://www.registermychapter.com/tsa/natl/>).

Once an advisor has received confirmation that their chapter has officially affiliated, they may then register for the state conference via the state conference website. All conference registration is done online; there is **NO ON SITE REGISTRATION**. All conference registration and changes must be completed by midnight on January 15, 2018. **THERE ARE NO EXCEPTIONS!**

To register for the state conference, go to: <http://www.registermychapter.com/tsa/co/Main.asp>, and click on CONFERENCE REGISTRATION. All registration materials, including online registration, printed housing lists, liability forms, MUST be completed and turned in along with payment to the state office or hotel PRIOR to the deadlines published in this guide! No forms or payments will be accepted at the conference. **NO EXCEPTIONS WILL BE ALLOWED!** If a chapter has not paid the conference registration fee by the published deadline, they will NOT be permitted to participate in the conference.

Payment can be made by check, money order, or credit card. No purchase orders will be accepted. Once online registration is completed, the computer system will allow chapter advisors to print out a copy of the registration invoice. Advisors will NOT get another copy.

Fees

- Early Bird Registration (registration completed prior to January 8): \$90
- Late Registration (registration after January 8, but before January 15): \$95

ALL ATTENDEES, including students, teachers, advisors, parents and chaperones who are actively taking part in the conference activities are required to pay the registration fee. Only officially registered and badged conference participants will be allowed in to TSA conference activities. There will be no accommodations made at the hotel for guests/family wishing to attend the awards ceremony. Parents coming to pick up their students following the awards ceremony must wait outside the hotel in the hotel parking lot in properly marked and designated parking spaces. Waiting in fire lanes and loading zones will not be permitted. **NOTE: Parents of elementary buddies will need to check in at conference headquarters to receive special credentials on Saturday and may stay through the awards ceremony. There is no registration fee for parents of elementary buddies.**

ALL PAYMENTS for conference registration must be received by FEBRUARY 1, 2018 in order for a chapter to participate.



State Conference Registration

Meals and Special Needs

Registration includes admittance to all conference activities, and includes a lunch during the competition on Friday. Please note: When registering online, advisors will have the option to indicate (via the SPECIAL NEEDS window) if an attendee has a special dietary need. It is the advisor's responsibility to indicate if a special meal (e.g., gluten free, vegetarian, etc.) is required. Additionally, it's also good to confirm with the State Advisor any special needs requests. **NO ADDITIONAL SPECIAL MEALS WILL BE PREPARED OTHER THAN THOSE REQUESTED IN ADVANCE!** Extra meal tickets for the Friday lunch can be ordered during the registration process for \$35.00.

Additionally, the conference will again feature the Food Truck Festival. Tickets for the festival can be purchased at the time of registration. The Festival provides an affordable dinner option for conference attendees on both Thursday AND Friday evenings of the conference. Details about the food trucks that will be present and their menus will be provided to the advisors via email as they become available.

In addition to placing any dietary restrictions in the SPECIAL NEEDS window, advisors should also indicate any other special needs information of which Colorado TSA should be aware (e.g., needs interpreter, wheelchair access, etc.). In cases where an interpreter is needed, the cost of any arrangements (including hotel accommodations) for an interpreter is the responsibility of the chapter/school/district and not of Colorado TSA. Interpreters will receive complimentary conference registration.

Payment Options

Payment for conference registration must be made no later than February 1, 2018 in order for a chapter to be allowed to participate in the conference. No payments will be accepted on site! Purchase orders cannot and will not be accepted as a form of payment for registration. Payment for REGISTRATION ONLY can be made via check or credit card. Payment for hotel rooms is handled directly with the hotel.

Once a chapter's students have been entered and their competitive events and meal options selected, the advisor should click on VIEW registration button to confirm the registration's accuracy. The advisor should then print a copy for the chapter's records. Payment then can be made one of two ways:

Payment By Check

Payments by check should be made payable to COLORADO TSA. The check AND a copy of the invoice generated by the registration system should be mailed to: Colorado TSA, 9101 E. Lowry Blvd., Denver, CO 80230. If a copy of the invoice is not included, the payment may not be credited in a timely manner.



State Conference Registration

Payment by Credit Card

Advisors wishing to pay for conference registration (NOT HOTEL ROOMS!) with a credit card, may do so through the COTSA secure PayPal account by following the PAY NOW button on the registration invoice. A 4% convenience fee will be added to the invoice total when paying by credit card.

In the field labeled “special instructions to the seller” enter the name of the school so payments can be properly applied to the chapter’s invoice. Failure to enter the school’s name in the “special instructions” box may delay the crediting of the payment. Enter the amount shown on the invoice which was printed earlier and then submit the payment. Advisors should print a copy of the receipt for the chapter’s records.



Hotel Reservations

The official conference hotel is the Marriott Denver Tech Center, 4900 S. Syracuse, Denver, CO 80237. Additional sleeping rooms have been blocked at the Hyatt Regency Denver Tech Center, 7800 E Tufts Ave, Denver, CO 80237.

All rooming reservations are handled through the Colorado TSA State Office. Payment arrangements and tax exempt information for the hotel rooms, however, must be made directly with the hotel. **Do not send payment for the hotel rooms to the COTSA State office.**

The rate for the rooms at the Marriott and the Hyatt are \$129/room/night with quad occupancy. There will be tax applied as well if a tax exemption paperwork is not properly submitted. Tax exemption for state tax will only be honored if payments are made with direct school district funds and if the tax exempt form is completed and turned in. The forms required by the hotel are included on the following pages.

To reserve rooms for the State Conference, please complete the ROOMING LIST forms contained in this guide (using as many pages as necessary) and send them via email in PDF format to Tony Raymond at tony.raymond@cccs.edu no later than January 15, 2018. The state office will handle uploading the information into the hotel computer systems. Again, payment for the hotel rooms is to be made directly to the hotel.

For safety and security reasons, priority for room reservations at the Marriott will be given to middle school chapters first, then to schools with middle and high school chapter combinations, and then, finally to high schools. Any overflow will be assigned to the Hyatt. Rooms are assigned by the hotels based on their rooming availability and configuration; even though a school may request the Marriott, depending on the above stated priority and availability, that request may not be able to be fulfilled.

For information regarding booking hotel rooms, please contact Tony Raymond, COTSA State Advisor at 720-858-2794.

PLEASE NOTE: For safety, security and liability reasons, conference attendees should stay as guests of the hotel. Please consult the State Conference - Policies and Procedures section of this guide for more information.



Hotel Rooming List

This form must be received by the Colorado TSA State Advisor in PDF format no later than January 15, 2018. Please list each of the students grouped according to the hotel rooms they will be in (maximum of four (4) people per room). Attach as many sheets as needed to complete your guest list.

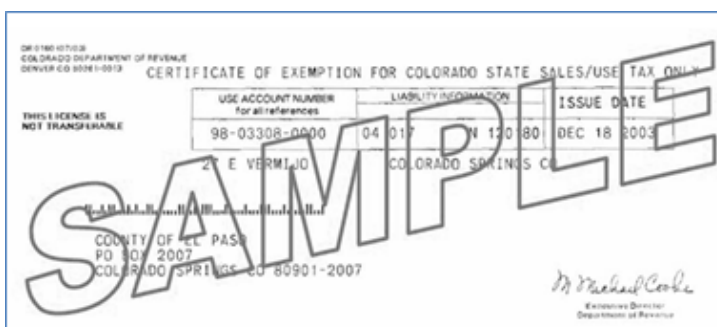
	Grade/ Sponsor	Last Name, First Name	M/F	Special Notes
1				
2				
3				
4				
	Grade/ Sponsor	Last Name, First Name	M/F	Special Notes
1				
2				
3				
4				
	Grade/ Sponsor	Last Name, First Name	M/F	Special Notes
1				
2				
3				
4				
	Grade/ Sponsor	Last Name, First Name	M/F	Special Notes
1				
2				
3				
4				
	Grade/ Sponsor	Last Name, First Name	M/F	Special Notes
1				
2				
3				
4				

SCHOOL NAME: _____ PAGE _____ OF _____

Hotel Forms

In order to qualify for tax exemption, a chapter must submit the following documents. The Denver Claim for Exemption Form and Credit Card Affidavit forms are on the following pages.

1. Sales Tax Certificate



2. Denver Claim for Exemption Form



3. Credit Card Affidavit (paying by credit card only)



**** No personal forms of payment****

The tax exempt organization must be paying directly for your stay to be exempt



CLAIM FOR EXEMPTION FROM DENVER SALES, USE, OR LODGER'S TAX
FOR USE BY HOTELS, MOTELS, AND RESTAURANTS
FOR THE FOLLOWING DESCRIBED EVENT

Organization's Name
Date of Event Phone ()
Authorized Representative Title
Address
Description of Event
Basis of Exemption: Religious Charitable Governmental

DO NOT HAVE YOUR CUSTOMER COMPLETE THIS FORM IF EVENT IS A FUND RAISER.
NO EXEMPTION IS ALLOWED FOR FUND RAISING EVENTS.

Indicate if all of the following statements are True for this event:

True False

- The purchase is included under and is part of the regular religious or charitable functions and activities of the organization, or is purchased in a governmental capacity.
The transaction is billed directly to the organization and payment is made directly from organization funds. (Purchases of food or lodging by individuals do not qualify for the exemption even though the individual may be reimbursed by the organization or government.)
The participants at the event have not and will not reimburse the organization in any way for any portion of the event such as by purchase of a ticket, payment of a registration fee, or my making a contribution toward the cost of participation. This statement must be marked "false" if event is a fundraiser.

The exemption does not apply to food, beverage, or lodging where the recipient of the food, beverage, of lodging reimburses the organization in any way, such as by the purchase of a ticket, payment of a fee, or making a contribution toward the cost of participation.

ALL OF THE ABOVE MUST BE TRUE FOR THE PURCHASE TO QUALIFY FOR EXEMPTION

The undersigned declares and affirms that the above statements are true and accepts liability for the tax should the transaction not qualify for exemption.

Name Title Date

FOR HOTEL/MOTEL/RESTAURANT USE TO VERIFY EXEMPTION:
DENVER TREASURY DIVISION - TAX COMPLIANCE, AUDIT UNIT - CITY OF DENVER - 640-3489
DENVER TAX ECEMPT STATUS VERIFIED BY: YES NO DATE
NAME OF PERSON AT CITY:

IMPORTANT: This form does not relieve the vendor of its obligation to verify that all conditions for exemption have been met. All exempt transactions are subject to audit. And the vendor may be held responsible for transactions exempted in error.
TPS 008 (1/94)



Instructions for Use of Affidavits

These instructions are applicable for both the Charitable or Religious Affidavit and the Governmental Affidavit.

Both of the affidavits require that the goods are sold directly to the charitable, religious or governmental agency **and payment is made directly from those organization's funds.** Please be sure this is the case before asking for completion of the appropriate affidavit. This affidavit is intended to assist the vendor in maintaining documentation that will be needed to verify whether a transaction is exempt. The sale is not exempt from taxes simply because this affidavit is completed. The responsibility for proper collection of the taxes remains with the vendor.

The ordinance provides that if the vendor and purchaser disagree on the application of the tax, **the vendor must collect the tax.** The vendor should give the purchaser a receipt showing the taxes collected. The purchaser then has 60 days to file a claim for refund directly with the City for recovery of the tax. The claim for refund form can be obtained from the Treasury web site.

The affidavits need to be completed in their entirety. Be sure information is complete, accurate and legible. Review the information being sure the Driver's License Number and customer's name are correct. Also the digits that are required from the credit cards are correct. **Only record and keep those digits from the credit card that the affidavit requires.** The signature of the customer should be the same as on the driver's license.

Charitable organizations must include a copy of the letter provided to them by the City stating they may make purchases without payment of the tax. Churches usually will not have a letter. The Church may be exempt upon accurate completion of the Charitable or Religious Affidavit.

For purchases by the federal government using a credit card please see City and County of Denver Tax Guide Topic 91 entitled "Credit Cards from Governmental Organizations". It explains which of the credit cards can be used for purchases of tangible personal property. It also explains how the numbering system can be used to identify if the federal government is paying for the purchase (not taxable) or the individual is paying for the purchase (taxable).



AFFIDAVIT OF SALE PAID BY GOVERNMENT CREDIT CARD

■ I affirm that this purchase qualifies for the Denver and Colorado sales tax exemption for sales to the United States government, the State of Colorado, its departments and institutions, and its political subdivisions (county and local governments, school districts and special districts); is a government purchase used only in an official governmental capacity; and will be paid directly by a government agency.

■ I have checked the applicable boxes below regarding information about payment for this purchase.

■ I accept that I remain directly liable for the sales or use tax assessment, and any applicable penalty or interest, if my purchase is found to not qualify for the exemption.

■ I understand that the vendor may request this affidavit for every purchase.

Please Print or Type

Customer Name		Driver License Number (include state)	
Agency Name		Colorado Tax ID Number or FEIN	
Customer Address		Agency Phone	
City	State	ZIP Code	

Check All that Apply

FEDERAL GOVERNMENT PURCHASES:

- Credit card used is a GSA Smart Pay2 card and is designated as such on the face of the card.
- Credit card used is a Fleet card, outlined in green, with a picture of a road and a flag.
- Credit card used is a Purchase card, outlined in red, with a picture of a keyboard and a flag.
- Credit card used is a Travel card, outlined in blue, with a picture of an airplane and a flag, and the 6th digit on the credit card is 0, 6, 7, 8, or 9.
- Credit card used is an Integrated card, outlined in gold, with a picture of an eagle and a flag.
- Credit card is issued to an agency within the Department of the Interior.

STATE AND LOCAL GOVERNMENT PURCHASES:

- For State of Colorado cards, the agency exemption number is printed on the card. The # is 98-_____
- The card states "For Official State Use Only" or "Tax Exempt."
- The card is a Purchasing Card and is designated as such on the card.

FOREIGN AND DIPLOMATIC EXEMPTION CARDS

- The card is State Department issued with the name/photo of the bearer and a blue, yellow, red, green, or red/green band across the bottom, and states on the face of the card what purchases qualify for exemption.
It does not matter what form of payment is used when these cards are presented.

Signature of Customer

Date

CITY AND COUNTY OF DENVER - TREASURY DIVISION

- Please check the box for the picture that matches the credit card used to make the purchase.
- Write in the first six digits and the last four digits from the credit card used to make the purchase.
- DO NOT WRITE THE COMPLETE ACCOUNT NUMBER.

FEDERAL SMART PAY CREDIT CARD PROGRAM



Account number _____ XX XXXX _____

Please attach this form to the signed Affidavit of Sale Paid by Government Credit Card



Affidavit of Non-Taxable Sale to Tax-Exempt Organization

The undersigned declares, under penalties of perjury, that the tangible personal property or taxable service purchased without payment of otherwise applicable Colorado sales (tax) es from

Vendor name: Hyatt Regency Denver Tech Center

Vendor address: 7800 E. Tufts Avenue, Denver, CO 80237

Is to be paid from the tax-exempt organization's funds and that said organization has not and will not receive any reimbursement through either direct payment, collection or "donation" from any person (s) for the use or consumption of said tangible personal property or service.

Signature	Title
Name of Tax Exempt Organization	
Sales Tax Exempt Number	Date



Deadlines

PAYMENT AND REGISTRATION DEADLINES ARE NOT FLEXIBLE! Failure to meet these deadlines may result in late fees and/or a chapter being unable to compete!

Deadline Date	Task To Be Completed
January 1, 2018	Deadline to complete National affiliation process. Chapters must be affiliated BEFORE registering for the state conference. To affiliate go to: http://www.tsaweb.org
October 20, 2017- January 15, 2018	STATE CONFERENCE REGISTRATION BEGINS! * Early Bird Registration (registration completed prior to Jan. 8, 2018): \$90 * Late Registration (registration after Jan. 8 but before Jan. 15, 2018): \$95 Go to: http://www.registermychapter.com/tsa/co . All substitutions, additions and changes must be completed by midnight January 15.
January 8, 2018	Early Bird registration ends! Registration goes up after January 8.
January 15, 2018	REGISTRATION CLOSSES AT MIDNIGHT - NO REGISTRATIONS OR CHANGES CAN BE MADE AFTER THIS DATE!
January 15, 2018	Online room reservations need to be completed. To claim a tax exemption, a chapter must include: <ul style="list-style-type: none"> • Sales Tax Certificate (see page 13 of this guide) • Denver Claim for Exemption Form (see page 14 of this guide) • Credit Card Affidavit (see page 16 of this guide) • Affidavit of Non-Taxable Sale to Tax-Exempt Organization (see page 17 of this guide) Hotel Rooming Lists should be sent to Tony Raymond, in PDF format via email: tony.raymond@cccs.edu . Payment arrangements must be made directly with the hotel.
February 1, 2018	All state officer applications must be completed and received, including reference letters.
February 1, 2018	All forms and registration payments are due by this date or your chapter will not be allowed to complete! Payments can be via check or online with a credit card. PAYMENT BY CHECK: Checks should be made payable to: Colorado TSA, 9101 E. Lowry Blvd., Denver, CO 80230 PAYMENT BY CREDIT CARD: Payments can be made by following the Pay Now button on the invoice at the time of registration, or online anytime at: http://bit.ly/INvkrOz . Please note that a 4% convenience fee will be added to the invoice for payments made via credit card.
Feb. 22-24, 2018	State Conference
June 22-26, 2018	National TSA Conference - World Congress Center, Atlanta, GA



Colorado TSA Presents



Fleece For Fighters



Our Mission:

Fleece for Fighters is a community service project created by Colorado TSA to create fleece-tie blankets for seriously ill or injured children.

WHY DONATE?

It is important to give back to the community, especially to those in need. This service project supports and comforts children who are struggling with a serious illness or injury. Join Colorado TSA in the fight against cancer and make a positive impact today!

HOW TO HELP

There are three things you can do to contribute:

1. Donate money to our Go Fund Me page at www.gofundme.com/fleeceforfighters. The donations will be used to purchase materials needed to make blankets.
2. Donate supplies. Contact Tony Raymond at 720-858-2794 or at tony.raymond@cccs.edu to make arrangements to pick up the supplies you have collected. Each blanket requires 3 yards of fleece fabric.
3. Create the blankets yourself! Here are a couple of links on how to make the blankets:
www.wikihow.com/Make-a-Fleece-Tie-Blanket
www.youtube.com/watch?v=R3UgR6rKEoE

The State Officers can pick them up, or your chapter can bring them to the state conference in February!

TACKLE THE CHALLENGE!

Create at least two blankets in your school's colors (or gather the material). We want to see all of COTSA's chapters represented in this great service project!



Colorado TSA invites you to participate in the

TOPS FOR TOTS

pop-top collection drive at this year's state conference!

“Pop tops” from your favorite beverage can go a long way in helping children and families in need! The tops will be donated to the Ronald McDonald House Charities (RMHC), a group that helps families with sick children find comfort and support when they need it most. RMHC provides resources and compassionate care to children and their families being served by hospitals in communities world wide.

By collecting the little tabs from your favorite beverage or soup can (or any other aluminum cans), you help raise money to help these families in need!

Why collect the pull-tabs and not the entire can?

Although the whole aluminum can is valuable, the tab is cleaner and smaller, making it easier to collect in large quantities than whole cans. The tab of a standard soda can is made of high quality, high-grade aluminum. By itself, it doesn't mean much, but when you put all together, pop-tabs add up and become a valuable donation.

What do we do?

All your chapter members have to do is break off the pop tops from their favorite beverages soup containers, or other aluminum cans, save them, and then bring them to the state conference where the state officers will collect and weigh them. Then, at the awards ceremony, the top tab-collecting chapter will be recognized!

So pop a top and start collecting!



Judging

Judging at the COTSA State Conference is a very important task and where everyone's help is needed - especially with the growth Colorado TSA has had!

Mirroring the processes at the National level, every chapter is required to provide judges for the state conference. Each chapter should provide a minimum one (1) judge for every ten (10) students a chapter brings to the conference (of course, more are always welcome!). For example, if a chapter registers 20 students for the state conference, they are required to provide two (2) judges; if a chapter registers 30 students, they would be required to provide three (3) judges, etc. If a chapter registers 10 or fewer students, they would only need to provide one (1) judge.

Chapters may designate parents, administrators, community leaders or members of the program's advisory committee as judges. Having every chapter provide someone to help judge events increases the efficiency of the state conference and helps ensure judging accuracy. Besides, this is a great way to involve the school and community in the good work the TSA chapter does!

Colorado TSA endeavors to not have chapter advisors serve as judges. However, chapter advisors are encouraged to serve as event coordinators for the various competitive events. Event coordinators are responsible for helping set up their assigned event(s) (i.e., set up of equipment, obtaining supplies from conference HQ, answering questions the judges may have about the event's guidelines, and helping verify scores and potential rule violations). This role allows more flexibility for chapter advisors when supervising their students.

Both potential judges and advisors who wish to coordinate an event at the state conference should contact the COTSA State Judging Coordinators Hayley DeBerard at hayleylisedavis@gmail.com, and Sara Butler at sara.butler@cccs.edu, or the Colorado TSA State Advisor, Tony Raymond, at tony.raymond@cccs.edu. All judges should be in place as early as possible to aid in the conference planning process.

Both event coordinators and contest judges are required to attend a JUDGING ORIENTATION prior to the start of the contest. The orientation is designed to ensure that:

- Judges have read all rules and are familiar with them.
- Judges are clear on expectations for judging the event and scoring.
- All judges can have their questions answered BEFORE there is an issue.
- Provide instructions on how to properly complete score sheets.
- Provide instructions on when scores are due in conference headquarters.
- Judges are connected to their specific Event Coordinator in case questions arise during competition.

IMPORTANT NOTE: Even if someone has been a judge in an event before, they will still need to attend a Judging Orientation Session!

COTSA Alumni Association

The Alumni of the Colorado Technology Student Association is a dynamic group of individuals who have participated as student members of our organization. Each year, this dedicated group of people volunteer their time to help out at the state conference! We couldn't put on as successful an event as we do without their help!

Colorado TSA is always looking for ways to reconnect with alumni and keep them involved! Alumni, or those interested in being an alumni member after graduation, should sign up with the Colorado TSA Alumni Association. It's a simple process...just visit: <https://goo.gl/forms/RctscNvP4aGzidXR2> and complete the online form or sign up at the state conference at the alumni booth. As an alumni association member, you still get the opportunity to participate in the TSA conference - only in a much larger capacity! Advisors are encouraged to have all of their graduating seniors to sign up for the Alumni Association.



Interested individuals can also connect with the alumni association by visiting the Alumni Facebook page at <https://www.facebook.com/COTSAalumni/>.

Website and Social Media

Colorado TSA maintains an active web presence through its web page and social media, including pages on Facebook as well as Twitter. Everyone is welcome to join!

Chapters should be taking photos of their activities throughout the year and sharing them with the COTSA State Office! It's a great way for to network with fellow TSA members and promote a school's chapter and activities. Photos of students conducting community service projects, working on their various competitive events, participating in meetings, or just having fun are all welcome! Chapters should send photos to the COTSA State Advisor, Tony Raymond, at tony.raymond@cccs.edu and should include name(s), location(s), and date(s) along with a brief description for each photo.

For news, updates, forms, and association-related information, check out the COTSA website at <http://www.cotsa.ccs.edu> or visit our Facebook page at <https://www.facebook.com/ColoradoTSA/>.



Awards & Recognition

There are a number of opportunities for students and advisors to be recognized through TSA, and we strongly encourage both students and advisors to take advantage of these great programs! For application forms and complete information, please visit the national TSA website at the following addresses:

- www.tsaweb.org/Student-Achievement-Awards
- www.tsaweb.org/Student-Scholarships
- www.tsaweb.org/Adult-Achievement-Awards

Achievement Awards (Gold/Silver/Bronze)

The TSA Achievement Program (bronze, silver, and gold awards) is designed to motivate and recognize student members for high effort in a school's technology education program. The TSA Achievement Program is an opportunity for every TSA member to strive and receive recognition for accomplishments and is designed to encourage excellence in the areas of leadership development, understanding technology, school/community service, and career/personal planning. This program is also planned so the highest awards represent outstanding individual performance. This noncompetitive, self-initiated program encourages students to develop appropriate attitudes and increase their knowledge and skills through involvement in technology education programs and activities.

Chapter Excellence Award

The Chapter Excellence Award recognizes those chapters who have developed and implemented a successful program of work including chapter involvement (at local, state, and national conferences, with the community, and other TSA chapters); financial leadership activities; leadership activities; and involvement with alumni.

Dr. Bob Hanson Distinguished Student Award

The recipient of the Distinguished Student Award is selected on the basis of valued service to the community and to TSA. Both past and present contributions are considered. Criteria for eligibility include: Active member in good standing with TSA for a minimum of one school year; active participation in TSA at the local, state, or national level; and recognition by fellow students, teachers, or administrators of technology education programs as a student who has achieved prominence and distinction.

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 an opportunity for student members to be recognized for their efforts and is designed to recognize TSA members who exemplify the high ideals of academics.



Awards & Recognition

Advisor of the Year

Students are encouraged to submit the name of their chapter advisor to the state office for the Annual Advisor of the Year award. The honoree is recognized at the state conference and then again at the National Conference for their outstanding work with TSA.

Dr. Harvey Dean Outstanding Recognition Award

The recipient is selected on the basis of valued service contributing to the growth of TSA. Both past and present contributions are considered (as verified by responsible parties). The criteria are as follows:

- The organization(s) that the recipient represents has supported TSA in some capacity at the local, state, or national level for a minimum of three years
- Active participation, as evidenced by attendance at the conferences, membership on committees, judging student events, etc.
- Efforts to advance TSA, as evidenced by encouraging business personnel and industrial leaders to support TSA activities

Distinguished Service Award

The recipient is selected on the basis of valued service to TSA. Both past and present contributions are considered (as verified by responsible parties). The criteria are as follows:

- Associated with TSA in some capacity for a minimum of three years
- Active participation as evidenced by attendance at the conferences, membership on committees, judging student events, etc.
- Involvement with advancing TSA as evidenced by work in professional education groups, publications, research, etc.
- High standard of attainment as shown by establishment of new TSA chapters, program expansion or innovation, or by achievement of student members who have achieved prominence and distinction
- Recognition by fellow professionals as indicated by similar awards from local, district, state or regional groups.

Honorary Life Award

Recipient has supported TSA in a significant way for a minimum of five years and is a person from whom TSA may reasonably expect continued interest in its activities.



Awards & Recognition

Distinguished Alumni Award

The recipients (three per year) of this award are alumni of TSA who have demonstrated commitment and service to TSA beyond graduation. The criteria are as follows:

- Graduated from high school at least three years prior, after being a member in good standing with TSA for a minimum of two years
- Active participation since graduation, as evidenced by attendance at the conferences, membership on committees, judging student events, or other service of value to TSA.

Future STEM Teacher Scholarship

The purpose of the Future STEM Teacher Scholarship is to support the STEM education profession by encouraging promising TSA students to pursue careers as K-12 STEM teachers.

William P. Elrod Memorial Scholarship

The scholarship is awarded for outstanding service in the field of technology to a TSA student who is college, university or career and technical school bound and who is in good academic standing, OR to a TSA alumnus/a currently enrolled in an undergraduate program or a career and technical school.

Johnson & Wales University Scholarship

Johnson & Wales University offers \$1000-full tuition National Student Organizations scholarships to TSA members. For more information and apply online at <http://www.jwu.edu>

Goodheart-Wilcox State Advisor of the Year

The recipient will have demonstrated significant support on behalf of TSA for a minimum of five years and is an individual from whom TSA may reasonably expect reliable and continued interest in its activities.

TSA Star Recognition

This award is a state-level award that provides recognition to those Colorado TSA chapters and members who actively assist new or lapsed TSA chapters in becoming active members. It is through these efforts that TSA continue to grow! Has your chapter assisted a new or inactive TSA chapter (middle or high school) with the affiliation process for this year? If so, we want to know about it so that your chapter receives Star recognition! Each chapter that helps a new chapter affiliate receives Star lapel pins and is recognized on the COTSA website. Pins are awarded on the following criteria:

- White Star Recognition 1 to 2 new TSA chapters
- Blue Star Recognition 3 to 5 new TSA chapters
- Red Star Recognition 6 or more new TSA chapters



COTSA Official Forms

The next few pages contain the forms that need to be completed by conference attendees and turned in by the deadlines listed in this guide. These forms ***CANNOT AND WILL NOT BE ACCEPTED ON SITE AT THE CONFERENCE! IF A CHAPTER DOES NOT HAVE THESE FORMS TURNED IN BY THE STATED DEADLINE, THEY WILL NOT BE ALLOWED TO COMPETE IN THE CONFERENCE.*** All forms, unless stated otherwise, are due to the State Advisor via the COTSA State Conference Form Upload Site (located at: <http://goo.gl/yrxWYF>, no later than FEBRUARY 1, 2018).

Medical Release Form

This form must be completed by EVERY registered conference participant, including advisors, chaperones and observers. This information is critical in the event of an emergency and needs to be kept by the advisor at the state conference. ***DO NOT TURN THESE FORMS INTO THE STATE OFFICE.*** These forms are to be kept by the chapter advisor in the event of an emergency.

Personal Liability Form

This form is to be completed by EVERY conference participant, including advisors, chaperones and observers. This form is to be turned in to the state advisor via the conference form upload website. All of a chapter's liability forms are to be scanned together as a single, multi-page PDF document and uploaded via the website (<http://goo.gl/yrxWYF>).

Photo/Media Release Form

This form must be completed by EVERY conference participant, including advisors, chaperones and observers. This form grants us the rights to take and use pictures at the conference to promote Colorado TSA. All of a chapter's photo release forms are to be scanned together as a single, multi-page PDF document and uploaded via the website (<http://goo.gl/yrxWYF>).

Attendee Conduct & Practices Signature Form

This form is to be completed by EVERY conference participant, including advisors, chaperones and observers. All of a chapter's Conduct and Practices forms to be scanned together as a single, multi-page PDF document and uploaded via the website (<http://goo.gl/yrxWYF>).



COTSA Official Forms

Instructions for Submitting Forms

Advisors should prepare the forms for distribution to the chapter's members. Do NOT copy them back-to-back since they will need to be separated to uploaded to the COTSA system.

Once the forms are returned to the chapter advisor, they should be separated by type (all the Personal Liability forms in one group, all the Photo/Media Release forms in another group, and the Attendee Conduct & Practices Signature forms in a third group). Each group of forms should then be scanned into its own separate PDF file for submission to the COTSA system.

Once a chapter's forms have been properly sorted and scanned, they are to be uploaded to the COTSA system located at: <http://goo.gl/yrxWYF>, no later than FEBRUARY 1, 2018. All of a chapters forms, with the exception of the medical release forms, are required to be uploaded at the same time. **DO NOT UPLOAD ANY MEDICAL RELEASE FORMS.** Those are to be kept by the chapter advisor in case of an emergency.

Please note that forms that are not separated into their respective types will not be accepted and could keep a chapter from participating at the state conference. DO NOT SEND HARD COPIES OF THE FORMS TO THE STATE OFFICE. Chapter advisors should upload the PDF versions of the required files via our uploads page and retain the originals for their own records.

Housing Forms

All rooming reservations must be done through the COTSA State Advisor's office. DO NOT make your reservations with the hotel directly. All housing forms are to be sent to the state advisor at tony.raymond@cccs.edu.

Schools will be responsible for making payment for rooms directly with the hotel. Should chapters wish to claim tax exemption, they must submit the Claim for Exemption from Sales, Use or Lodgers Tax Form (which exempts the chapter from some taxes, if applicable); and Affidavit of Sale made to a Charitable or Religious Organization. Those forms are to be sent directly to the hotel.

American Cancer Society Donation Form

In an effort to help our national charitable partner, the American Cancer Society, Colorado TSA is providing conference attendees the opportunity to donate to this worthy cause. If any conference participant would like to donate, they simply need to complete the form located in this guide. All American Cancer Society Donation Forms/Checks are to be sent via USPS to the COTSA State Office and not submitted online. Send all ACS donations to: Colorado TSA, c/o Tony Raymond, 9101 E. Lowry Blvd., Denver, CO 80230. ***Make checks/money orders payable to American Cancer Society.***



Medical Release Form

**REQUIRED BY ALL STUDENTS & ADULTS
ATTENDING THE COTSA STATE CONFERENCE
(TO BE KEPT BY EACH CHAPTER ADVISOR - PRINT CLEARLY)**

Student: _____
Advisor: _____ School: _____

Medical Information

Date of Birth: _____

Known allergies (drugs or otherwise): _____

Date last tetanus shot administered: _____

Medication currently being taken: _____

Describe any history of heart condition, diabetes, and asthma, epilepsy, or rheumatic fever, etc.: _____

Physical restrictions (swimming, running, etc.) _____

Relative's name: _____ Best Contact Number: (____) _____

Physicians name: _____

Insurance Information

Medical Insurance Co.: _____

Identification / Policy No.: _____

Subscriber's Name: _____ Phone: (____) _____

Subscriber's place of employment: _____

I, _____ (parent/guardian) hereby authorize any physician member of the Department of Emergency Medicine of an accredited hospital or any member of the medical staff of an accredited hospital to render medical treatment, which is in his/her judgment may be deemed necessary in the care of _____ (child/student) while attending the Colorado Technology Student Association State Conference (including time traveling to and from the conference).

Parent / Guardian signature _____ Date _____

ADVISORS – PLEASE NOTE:

This form is to be kept by you, the local chapter advisor, at the conference and given to the appropriate medical authorities in a medical emergency!

DO NOT TURN THIS FORM INTO COLORADO TSA!



Personal Liability Form

REQUIRED BY ALL STUDENTS & ADULTS ATTENDING THE COTSA STATE CONFERENCE

**ALL FORMS MUST BE UPLOADED TO
COTSA STATE CONFERENCE FORM UPLOAD SITE (<http://goo.gl/yrxWYF>)
NO LATER THAN FEBRUARY 1, 2018.**

Name of Participant: _____
Date of Birth: _____
School: _____
School Address: _____
Home Phone: (_____) _____ School Phone: (_____) _____

“I hereby agree to release the Colorado Technology Student Association (COTSA) and the Colorado Community College System, its representatives, agents, servants, and employees from liability for any injury to the above named person at any time while attending the Colorado State Technology Student Association’s State Conference, including travel to and from the conference, excepting only such injury or damage resulting from willful acts of such representatives, agents, servants, and employees.”

“I do voluntarily authorize the Colorado Technology Student Association’s State Advisor, conference chair, assistants and/or designees to administer and/or obtain routine or emergency diagnostic procedures and/or routine or emergency medical treatment for the above named person as deemed necessary in medical judgment.”

“I agree to identify and hold harmless the Technology Student Association, Inc., the Colorado Technology Student Association, the Colorado Community College System, State Advisor, and said conference chair and/or assistants and designees for any and all claims, demands, actions, rights of action, and/or judgments by or on behalf of the above named person arising from or on account of said procedures and/or treatment rendered in good faith and according to accepted medical standards.”

Adult/Parent or Guardian (if child or student)

Date

Participant

Date



Photo/Media Release Form

**REQUIRED BY ALL STUDENTS & ADULTS ATTENDING THE COTSA STATE CONFERENCE
ALL FORMS MUST BE UPLOADED TO
COTSA STATE CONFERENCE FORM UPLOAD SITE (<http://goo.gl/yrxWYF>)
NO LATER THAN FEBRUARY 1, 2018.**

I hereby consent to and authorize the use and reproduction by Colorado TSA, the Colorado Community College System (CCCS), or anyone authorized by Colorado TSA or CCCS, of any and all photographs/digital images/videotapes/recordings of:

Attendee's Name

from the Colorado State Technology State Conference at the Marriott Denver Tech Center/Hyatt Regency Denver Tech Center for use by Colorado TSA and/or the Colorado Community College System (CCCS), its employees, officers and agents, and the right to copyright and/or use, reuse and/or publish, republish photographic pictures, digital images, video tapes and recordings in conjunction with the above named individual's own name.

I also give permission for these photographic/digital images/videotapes/recordings to be used in its entirety and/or edited version as deemed necessary by Colorado TSA and/or CCCS (to include usage of images on Career and Technical Student Organization [CTSO] websites, Colorado TSA's website and social media, including, but not limited to Facebook, Instagram and Twitter).

Furthermore, permission is also given for the photographs/digital images/videotapes/recordings completed at the state conference to be used by Colorado TSA and/or CCCS at any time in the future without further clearance from me.

I understand that these photographs/digital images/videotapes/recordings may be used for marketing purposes (including websites, promotional materials and social media) by Colorado TSA and CCCS. I have read the foregoing release, authorization and agreement, before signing below, and warrant that I fully understand the contents thereof.

I hereby grant permission for photographing, videotaping and/or recording.

Signature of Parent/Guardian* or Individual

Date

* If individual is under 18 years of age.

Address: _____

City: _____

State: _____

Zip: _____

***NOTE: Any student who is subject to harassment due to the publishing of photos
(either in publications or on the websites) should contact the State Advisor immediately.***



Conference Conduct & Practices

This form **MUST BE COMPLETED BY ALL PARTICIPANTS** (students & adults) attending the COTSA State Conference. All forms **MUST BE SIGNED by the attendee, parent, advisor, AND principal**, and uploaded to the Colorado TSA State Conference Form Upload Site (<http://goo.gl/yrxWYF>) **NO LATER THAN FEBRUARY 1, 2018.**

1. The term “attendee” shall mean any student or adult attending the conference and taking part in its activities.
2. Identification badges must be worn at all times by persons in conference attendance.
3. There shall be no defacing of public property. Any damages to the property or furnishings in the hotel rooms or buildings must be paid by the individual(s) or school(s) responsible.
4. Attendees shall keep their advisors informed of their activities and/or whereabouts at all times. No attendee shall leave the conference hotel (except for authorized events) unless permission has been received from their chapter advisor(s).
5. Attendees should be prompt and prepared for all activities.
6. Attendees should be financially prepared for all possibilities.
7. No attendee shall remain in the sleeping room of the opposite gender unless the door is open at all times.
8. No attendee shall remain in the sleeping room of the opposite gender past curfew.
9. No attendee shall possess alcoholic beverages, narcotics, or firearms, in any form at anytime, under any circumstances. (See No Weapons Policy under Policies and Procedures on page 21 of the Call to Conference)
10. Smoking is not permitted.
11. Attendees are required to attend all general sessions and activities assigned, including workshops, all general sessions, competitive events, etc., for which they are registered, unless engaged in some specific assignment taking place at the same time.
12. Chapter advisors are responsible for their attendees’ conduct.
13. Attendees violating any of the conduct rules will subject their entire delegation to disqualification and being removed from the conference.
14. To provide a safe environment for minors, it is the policy of Colorado TSA that a minimum of two adults supervise or be in attendance with minors during any organization-related activity. The purpose is to avoid one-on-one interactions between adults and minors that are not easily observable by others. During competitive events, there should be a minimum of two adults in the room; judges are not to be left in a one-on-one situation with students.
15. Colorado TSA reserves the right to dismiss any attendee (adult or student) from the conference without refund of registration fees for inappropriate actions, or a violation of these conference conduct and practices requirements.

Attendee:

I have read and completely understand the above COTSA State Conference Attendee Conduct Practices and Procedures. I do hereby agree to follow the practices and procedures described. I fully understand that this is an educational activity and will, to the best of my ability, apply myself for the purpose of learning and will uphold the finest qualities of a person representing my school.

Attendee Signature

Date

Parent/Guardian, Advisor/ Teacher, & Principal:

I approve the student named above to attend the 2018 Colorado Technology Student Association State Conference in Denver, CO on February 22-24, 2018.

Parent/Guardian Signature

Advisor/Teacher Signature

School Principal Signature



ACS Contribution Form



During the school year, TSA chapters all across the country are encouraged to include in their Program of Work an activity that benefits the National TSA National Service Project - our work with the American Cancer Society. Chapters can engage in a number of activities, including participating in a Relay for Life event. Relay for Life is the ACS's signature event that offers chapters and schools a fun, healthy opportunity in the fight against cancer. The money raised by the individual chapters helps the vital research, education, advocacy, and patient services of the American Cancer Society.

In addition to recognizing chapters at the national conference for their overall contributions to the ACS, individuals can also help our National Service Project and contribute to the American Cancer Society directly. If you would like to help Colorado TSA support the efforts of the American Cancer Society by making a donation, please do so using the form below and include your donation (with checks or money orders made payable to the American Cancer Society) with your student's registration form.

Thank you for your time, commitment and generosity.

Name:

School:

Donation Amount: \$15 \$25 \$50 \$100 Other _____

All American Cancer Society Donation Forms/Checks are to be sent via USPS to
the COTSA State Office and not submitted online.

Send all ACS donations to: Colorado TSA, 9101 E. Lowry Blvd., Denver, CO 80230.

Make checks/money orders payable to American Cancer Society.





Colorado Technology Student Association

Documentation Style Guide

Updated 9/22/2017



Documentation Style Guide

Introduction

In today's technological world, communication takes a variety of forms – one of which is writing. Any successful technological endeavor will have with it a set of documents that detail its inception, development and evaluation. The competitive events projects for TSA are no different!

Most TSA competitive events require some form of documentation portfolio. Some events will require the portfolio to be assembled and then scanned into electronic format to be submitted on a USB flash drive while other events will require a hard copy be printed out and turned in. In both cases, the guidelines outlined here apply; the only difference is in the final form the portfolio takes.

Each competitive event will also list specifics as to what should be included in the portfolio and in what order. For example, some events may require drawings or photographs while others won't; some may require photo release forms while others may require work logs.

It is the intent of this guide to help students create high quality professional looking documentation portfolios that are easy for judges to read and understand – regardless of the competitive event or whether or not the portfolio is hard copy or electronic. Advisors and students are strongly urged to review and follow this guide when preparing documentation portfolios.

Requirements

When it comes to documentation, all materials (including drawings, photographs, logs, etc., all of which comprise a “portfolio”) are required to be secured in a clear front report cover (a sample of the type of report cover can be found here: https://www.staples.com/Oxford-Clear-Front-Report-Covers/product_SSI003226). Documentation that is not submitted in the proper clear front report cover may cause an entry to receive a 20% general rules violation (see National Competitive Event Guide General Rules), or be disqualified entirely. **Documentation should NOT be submitted in a three-ring binder.**

Early Submission Entries

For competitive events at the state conference that are designated as “Early Submission” events, documentation portfolios, students should prepare the documentation portfolio as if it were to be handed in at the state conference; it is then that the completed portfolio be scanned and saved as a single, multi-page PDF document. The scanned portfolio is then to be submitted (along with any URLs) via the Early Submission Upload Site (<http://goo.gl/hwsZvG>) by the stated deadline. Documentation portfolios that are not submitted as single, multi-page PDF documents will not be evaluated. Students should ALWAYS bring the hard copy portfolio with them to the state conference in the event the contest entry advances to a finalist round.

Follow the Rules!

Before beginning a portfolio, it is critical to follow each specific contest's rules and regulations closely! Don't rely on this guide alone to create the documentation! This guide is not designed to indicate exactly what is needed for every competitive event, but rather assist in the formatting of the document so that it presents the material in a professional, readable manner.



General Guidelines

All documentation portfolios should be typewritten. Handwritten documentation is NOT acceptable. Yes, there will be some items within the documentation that will be required to be handwritten or hand-drawn, but those items are the exception rather than the rule. In most cases, documentation that is hand-written, unless otherwise specified, will be assessed penalty points or disqualified. The assessment of penalty points could very well take an otherwise-stellar project out of medal contention. Additionally, word processed documents have several advantages:

- Spell/grammar check. While it's not always accurate and will not pick up every mistake (like using "THEIR" instead of "THERE"), at least there is the opportunity to eliminate the bulk of spelling and grammar mistakes.
- The portfolio is easier to read. A portfolio that is hard to read or is illegible will find disfavor with the judges.
- The document can always be edited if it has been prepared on a computer. For example, if in the process of proofreading the documentation a chart or graph needs to be added, it can simply be inserted. Typographical errors can be fixed without having to rewrite the entire document or making a messy addition. By having an editable electronic version, portfolios can also be edited after the state conference in preparation for nationals using judges' feedback!



Specific Guidelines

Is Documentation Necessary?

The first thing to determine is if a documentation portfolio is even needed, and if so, what the requirements for that specific portfolio are. For the most part, the answer would be yes, but there are some events (dragster, for example) that do not require a full portfolio but only drawings and the LEAP documents. If a project does not require a documentation portfolio, all that should be turned in is what the contest guidelines call for and nothing more...and nothing less. If more materials are turned in than are required, there is a good chance that all the additional material will NOT be considered by the judges - or worse, assessed penalty points because it is “extra material.” If the material turned in is less than is required, penalty points could be assessed, or...worse...the project could be disqualified entirely. In any case, it’s a good idea to carefully read the rules (ALL THE RULES) for an event before beginning to work on a project or portfolio.

Another key is to assemble the portfolio as the project is being completed. It’s not wise to leave the documentation until the last minute. A portfolio should be started when the project/competitive event is begun so the information presented can be accurately recorded as tasks are accomplished (like work logs).

Where are the Rules?

The rules for all of the competitive events are located in the Competitive Events guides, of which there are two:

- National TSA Competitive Events Guide (there is one for the high school and one for the middle school).
- Colorado TSA State Competitive Events Guide (this one contains all the rules for both the middle and high school events that are only offered at the state level).

In each of these books, the competitive events are listed alphabetically and are broken into several sections as follows:

National Competitive Events Guide

- Overview – A brief summary of the event.
- Purpose – This tells you the goal of the event – what you are supposed to learn/do.
- Eligibility – This tells you how many individuals/teams from your chapter/state can compete in a contest.
- Time Limits: This tells you how long certain portions of the contest will take.
- Attire – This section tells you what the uniform requirements are for the contest. This is what you must wear to compete in the event at the state or national level. If you are not wearing appropriate attire, you will be assessed a rules violation or disqualified.
- Procedure – This section tells you how the contest will work.
- Regulation – These are the “rules” for the event. It explains in detail what you should include in your project – a display, a documentation portfolio, a model, etc.
- Evaluation – This tells you how the project will be graded. Use this with the rubric to see exactly what the judges will be looking for.
- Notes – Specific notes for you that relate to the project.



Specific Guidelines

COTSA State Competitive Events Guide

- **Purpose** – This tells you the goal of the event – what you are supposed to learn/do.
- **Eligibility** – This tells you how many individuals/teams from your chapter can compete in a contest.
- **Specific Regulations** - These are the “rules” for the event. It explains in detail what you should include in your project – a display, a documentation portfolio, a model, etc.
- **Procedure** – This section tells you how the contest will work.
- **Evaluation** – This tells you how the project will be graded. Use this with the rubric to see exactly what the judges will be looking for.

The Documentation Portfolio

The documentation portfolio should begin at the same time a project is started. Most contests will require that contestants keep a work log or include preliminary drawings as they work through the design/problem-solving process, so it's best to complete these items as the project develops rather than try to remember and document all the crucial steps at the very end. Waiting until the last minute may result in leaving out key steps and information which in turn could mean the difference between winning a medal or not.

Portfolio Requirements

The requirements for what should be in a documentation portfolio will be listed in the specific competitive event rules under the REGULATIONS or SPECIFIC REGULATIONS sections. In these sections will be EXACTLY what is required for the contest, including information on the documentation portfolio. Below is an example from the High School National Competitive Events Guide showing the Regulations Section.

REGULATIONS

In each competitive event, look in the REGULATIONS SECTION. There, you'll see EXACTLY what is required, including any requirements for a notebook.

Read the General Rules and Regulations in the front of this guide for information that applies to all of TSA's competitive events.

A model is neither a "miniature building," nor a mere illustration of a design concept. It serves as an assessment tool for the design. Too much detail can obscure important qualities, and not enough detail may generate an overly vague impression.

REGULATIONS

- A. The architectural model must be placed on a site board no larger than 24" square.
- B. A documentation notebook is required and must be submitted with the display. A standard three (3)-ring binder, with a clear front sleeve for a cover page, is required. The cover page must include the event title, the conference city and state, and the year. The inside of the binder must include the following single-sided, 8 1/2" x 11" pages, in this order:**
 1. Title page with the event title, the conference city and state, and the year; one (1) page
 2. Table of contents; pages as needed
 3. A description of how the team interpreted the design challenge and an explanation of the style and merits of the team's design concepts; one (1) page
 4. Demolition plan for the existing structure; maximum of two (2) pages
 5. List and describe how each of the following construction systems (any and all that apply) have been incorporated and applied to the team's solution: building codes, building permits, construction methods and materials, electrical wiring, plumbing, HVAC, and site requirements; maximum of six (6) pages
 6. ALBERD assessment for the project, according to the USGBC standards for green building; one (1) or more pages
 7. A schedule of finish materials for all exterior and interior surfaces of the architectural design (this is not a list of the model construction materials); one (1) page
 8. A reproduction copy of original hand drawings and printed/plotter-generated copies of CAD drawings for the following required drawings (each drawing to be submitted on maximum drawing sheet not size 8-1/2" x 11") with

56

2017-2018 Colorado TSA Call to Conference and State Competitive Events Guide

The Documentation Portfolio

As stated before, some events will require that all the documentation for a project be created and then scanned and converted into a single, multi-page PDF document for submission on a USB flash drive; other entries require a hard copy of the portfolio. For those latter events, all the required documentation should be secured in a clear front report cover. An example of the cover is shown below and here: http://www.staples.com/Oxford-Clear-Front-Report-Covers/product_SS1003226. Page protectors may be utilized to prevent pages from being accidentally ripped/torn out, or worse yet, lost. Pages should not be double-sided in the protectors unless it is specifically indicated in the competitive event rules; failure to follow this specification can result in point deductions or disqualification.

Three-ring binders should NOT be used. A portfolio that is NOT submitted as specified by the rules - either on a flash drive or in a clear report cover - will not be evaluated!





The Documentation Portfolio

The Documentation

The heart of any project - whether it's for TSA or for an employer - is the documentation. Documentation has the ability to either make or break a project, so students should plan on spending as much time (if not more!) on the documentation than they do on the project itself.

Again, all documentation should be word processed. Handwritten documentation should not be included unless it is specifically called for in the event guidelines. Some events may require competitors to include notes and sketches – and those pieces of documentation are acceptable if handwritten. However, the remainder of the documentation must be typed on a computer and printed on an ink jet or laser printer.

The documentation should be printed on 8.5" x 11" paper unless otherwise stated by your event guidelines.

The documentation should be printed single-sided unless otherwise stated by your event guidelines.

All entries must be in English.

Unless otherwise specified, there should be absolutely **NO IDENTIFYING INFORMATION** on a project or in a documentation portfolio other than an identification number (individual or team). Exceptions to this rule are those events that require content aligned with a school or community (e.g., Construction Challenge and Community Service Video).

The portfolio should be proofread for grammatical and spelling mistakes. And then it should be proofread again. And then it should be proofread a third time. Several different people should proofread it and check for any errors before it is submitted for competition. Students should not rely solely on the spelling/grammar checker on the computer; it's good, but it's not perfect. The computer may not pick up on the wrong usage of words such as "HEAR" vs. "HERE" or "THEIR" vs. "THERE". The misuse of words in the documentation could result in point deduction and that could translate into a lost medal or trophy!



The Documentation Portfolio

Here are the specifications that should be used in creating the documentation portfolio:

Font Size

- Use only 11 or 12 point type. Do not shrink type to fit on a page; and conversely, do not increase the size of the type to fill a page. Instead, use concise language to get text to fit! Don't be afraid to edit!
- Do not mix and match type sizes in within the documentation. Keep all text the same size unless specifically instructed to do otherwise.

Font Style

- Throughout the documentation, contestants should be consistent in the use of fonts and typefaces, both in style and in size. Fonts should not be mixed and matched; mixing and matching is visually unappealing and makes the portfolio look unprofessional. Contestants should pick ONE typeface and stick with it throughout all of the documentation.
- A standard type font such as Times New Roman or Arial should be used throughout the documentation. Yes, it may be "boring," but if any last minute work needs to be done on someone else's computer, there's usually a good chance those two typefaces are on it. Using a standard, nondescript typeface would prevent having to reformat the entire document. Besides, using one of these two fonts will make the documentation easier for the judges to read.
- Word Art should NEVER be used! Just because it's available doesn't mean it should be used. For headings, subheadings, and titles, a bolded or bolded/italic version of the same font used for the body text will suffice.

Character Spacing

- Only one (1) space is required after punctuation ending a sentence. Thanks to computers handling spacing, only one is necessary. Consistent use of spaces in the document is also critical.
- Only one (1) space after a semicolon (;) comma (,) or colon (:) is necessary.
- Only one space between any state abbreviation and zip code is necessary.

Line Spacing

- Unless otherwise specified in a competitive event's guidelines, all text should be single-spaced with a double-space put in between paragraphs.
- When using bulleted lists, single space individual items; double space between numbered items.

Margins

- In general, unless otherwise stated in the competitive event guidelines, all margins should be 1" (one inch).
- Do not shrink or stretch the margins. Margins should not be increased to help stretch the length of the text. Conversely, margins should not be made smaller to accommodate a lengthy document. Fudging the margins makes the document look unprofessional and messy. It is far better to edit the text to fit the space instead.



The Documentation Portfolio

Page Numbers

- Page numbers should be included. This will help judges easily find information in the documentation.
- Page numbers should be in the same font size and style used throughout the documentation.
- Page numbers should be 0.5” from the bottom of the page at the right margin starting on page 2.

Below is an example of what a page of text in a documentation portfolio should look like:

Text Sample

1" margin
↑
Heading
↓

Type is all the same font and the same size.

Text is single spaced with a double space between paragraphs.

This generic text illustrates how your text should appear on the page. Note that the type is all the same font, and all the same size. It should be that way throughout your document.

1" margin ← 1" margin →

Ipsum dolor sit amet, consectetur adipiscing elit. Phasellus ut leo non lacus dictum porta. Nunc iaculis urna ut scelerisque luctus. Praesent nulla orci, adipiscing ac neque id, vestibulum eleifend magna. Etiam vulputate rhoncus magna, et iaculis ligula feugiat ac. Quisque ligula mi, pharetra vitae diam in, condimentum mollis purus. Etiam vestibulum massa in lectus semper consequat. Phasellus sit amet ultrices ligula. Praesent pretium ante sem, in eleifend nisi sagittis ac. Aliquam eu eros non nisi pharetra varius eu et est. Fusce condimentum condimentum orci interdum pulvinar. Ut tincidunt congue dolor a laoreet. Pellentesque nec venenatis nisi, vel varius tellus. Proin eu nulla id tellus imperdiet egestas eu vitae arcu. Donec egestas id justo sed bibendum. Sed blandit lobortis enim vel dapibus. Nam ut odio vitae felis ullamcorper semper vitae lacinia mauris.

Fusce lacus justo, porta a convallis eget, sodales at neque. Duis imperdiet lorem eu lobortis blandit. Phasellus vel leo sit amet mauris commodo porta. Cras porta convallis arcu sit amet molestie. Sed quis lorem risus. Quisque ut laoreet nisi. Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Interdum et malesuada fames ac ante ipsum primis in faucibus. Sed convallis rhoncus neque malesuada sodales.

For bulleted lists, single space individual items; double space between numbered items →

1. Aliquam tempus suscipit neque, eget suscipit ante suscipit in.
2. Interdum et malesuada fames ac ante ipsum primis in faucibus. Donec nec mi malesuada, ultrices ipsum non, bibendum orci. Morbi ornare arcu tortor, suscipit placerat lacus mollis vitae. Nulla facilisi. Nullam pharetra nunc sit amet tellus tincidunt bibendum. Aenean mattis eros eget suscipit adipiscing elit.
3. Ut varius venenatis justo sit amet varius.

Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Donec placerat iaculis diam non adipiscing. Aenean dui massa, eusmod at arcu non, egestas scelerisque velit. Ut at ullamcorper massa, at feugiat diam. Duis egestas rhoncus tortor a suscipit. Donec dignissim lacinia quam et lacinia.

Nam ornare consectetur nibh, non lobortis purus sodales non. Suspendisse potenti. Ut id consectetur turpis, quis molestie ipsum. Suspendisse vestibulum id nisi in pellentesque. Aliquam non nunc tortor. Integer dapibus quam sit amet imperdiet mollis. Proin sem nunc, dignissim ac quam sit amet, placerat consectetur sem. Aenean laoreet eu lorem id imperdiet. Phasellus ullamcorper libero arcu, et porta dolor suscipit sit amet. Morbi sed erat convallis, molestie ipsum nec, posuere est. Duis mauris augue, rhoncus ac molestie at, semper at risus. In sit amet tortor in ligula commodo volutpat vitae vel orci. Aliquam nibh augue, interdum vel ullamcorper id, dapibus id velit. Aliquam sapien metus, mollis in enim vel, porttitor feugiat ipsum.

Interdum et malesuada fames ac ante ipsum primis in faucibus. Ut varius venenatis justo sit amet varius. Donec nec mi malesuada, ultrices ipsum non, bibendum orci. Morbi ornare arcu tortor, suscipit placerat lacus mollis vitae

1" margin ↓

2
↓ 1/2" margin

The Documentation Portfolio

Inside the Documentation

Here's what should be included in a documentation portfolio, along with any specific items the event guidelines call for:

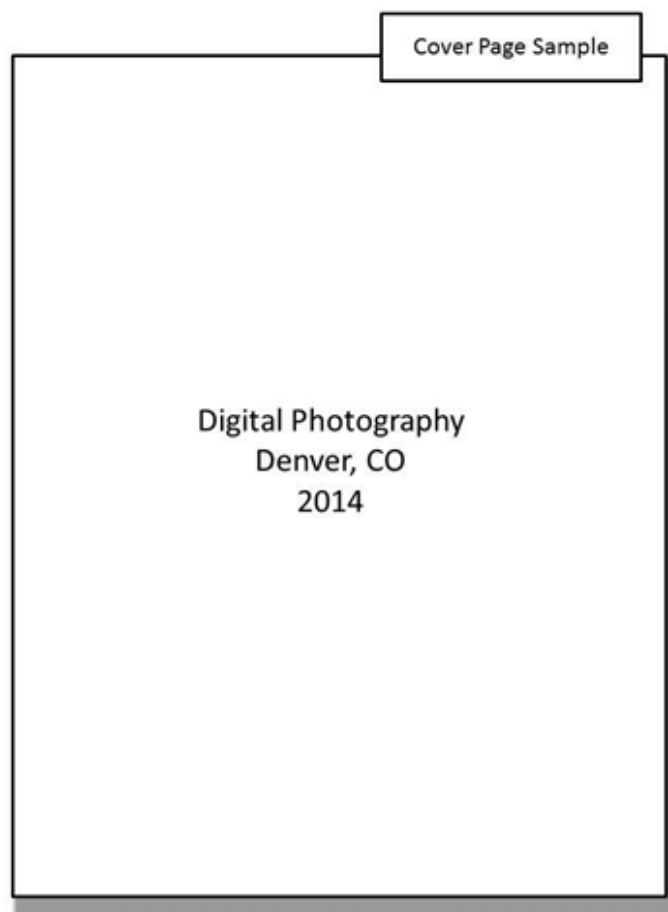
The Cover Page

Every portfolio should have a cover page. This will help a) make sure the project is placed in the right area to be judged; b) aid the judges when they are evaluating the portfolio/project. The cover should be blank, except for:

- The Event Title
- The Conference city and state (this will need to be changed if the project progresses from the state conference to the national conference)
- The Year
- There should be **NO NAME OR ANY OTHER IDENTIFYING INFORMATION** on the cover beyond an ID number (individual or team). For nationals, no identifying information whatsoever should be on the cover page. When a project is turned in at nationals, they give the contestant a sticker with an ID number (one that is completely different from the state conference ID number) to put on it.

That's it – plain and simple. No art, graphics, sketches, logos, or other information - not even the official TSA logo! It may be dull and boring, and it may not look all that attractive, but each competitive event calls for a simple cover to identify the portfolio and the event to which it belongs. That's it - nothing more. Competition is sometime so close that even a small thing like the cover page can determine a winning entry.

Here is an example of what a cover page should look like:





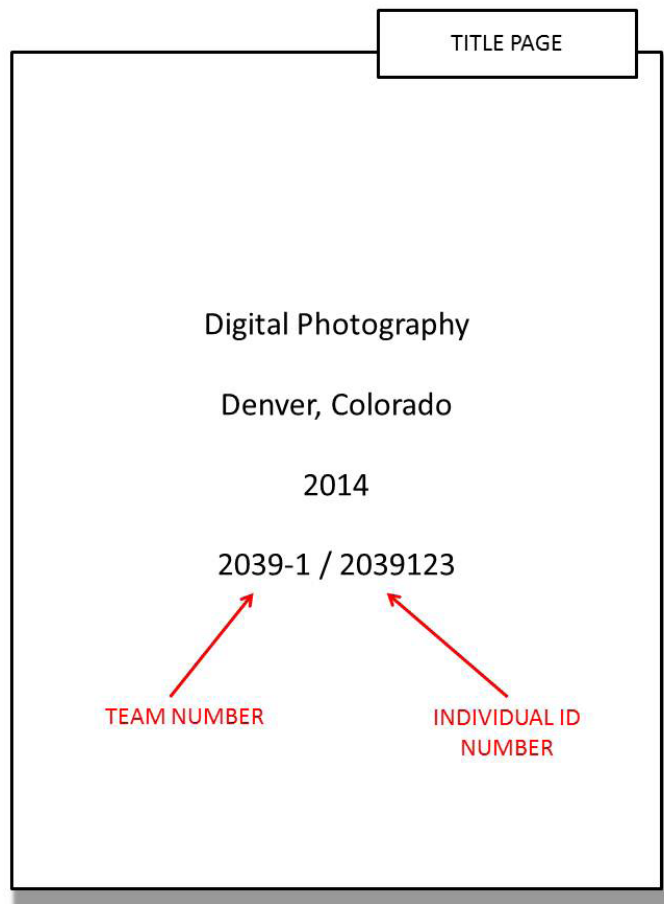
The Documentation Portfolio

The Title Page

The Title Page is different from the Cover Page. The title page is the start of the written documentation and appears as the FIRST page, INSIDE the portfolio after the cover page. Here are the specifications for a Title Page:

- The Title Page is one (1) page in length and should not include any graphics (including Word art), logos, sketches or other identifying information.
- The Title Page should include:
 - ▶ The Event Title
 - ▶ The Conference City and State
 - ▶ The Year of the Conference
 - ▶ The Team/Chapter ID Number – This number is provided to each chapter advisor after registration for the state conference. This number will change if the project progresses from the state conference to the national conference. There should be no identifying information like name or school name on it whatsoever. At the national conference, when turning in an entry, sticker with a unique ID number will be provided at check in.

Here is an example of what a Title Page should look like:



The Documentation Portfolio

Table of Contents

Most documentation notebooks will require a Table of Contents. Here are the specifications for the Table of Contents:


- The Table of Contents can be as many pages as needed.
- The Table of Contents heading should be centered at the top of the page, followed by a double-space.
- The items in the table of contents should include all the items called for in the event’s guidelines and they should be in the same order as called for in the guidelines.
- The names of the items in the table of contents should be flush left.
- The page numbers should be right-aligned with leader lines.

Here is an example of what a Table of Contents should look like:


TABLE OF CONTENTS

TABLE OF CONTENTS


Introduction.....	1
Investigation	
Identification of the Problem.....	2
Design Brief.....	3
Design Specification.....	5
Design	
Design Process.....	7
Production Plan.....	9
Solution Creation	
Tools, Materials & Processes.....	11
Work Log.....	12
Evaluation	
Evaluation of Solution.....	13
Evaluation of the Production Plan.....	15
Self Evaluation.....	17
Suggested improvements.....	19
References.....	20



The items in the table of contents should be listed exactly as they appear in the event guidelines. They should be flush left.



There should be a dot leader to direct the reader to the page number.



The page numbers should be flush right against the margin.

All type should be the same size and the same font as the rest of the document. No artwork, logos or other graphics should be included on this page. KEEP IT SIMPLE!



The Documentation Portfolio

Tables

Tables are useful in showing data and they should be used where appropriate. However, unless they are formatted neatly and consistently, the data becomes lost or unusable. Here are the formatting guidelines for tables:

- Use bold type for titles and column headings
- Column headings should be centered over column.
- Tables using one- and two-line column headings should be aligned at the center of the cell.
- Unless specifically required by the event’s guidelines, gridlines should be used.
- Include the dollar sign (\$) when showing dollar amounts in columns.
- All columns containing numbers should be right-aligned or decimal aligned.
- All columns containing text should be left aligned (with the exception of column headings).
- The body of the table should be single-spaced.
- Tables should be centered on the page horizontally unless otherwise indicated.

Here is an example of how a table should look:

TABLES

Use bold type for titles and column headings. Column headings should be centered over the columns.

Tables using one- and two-line column headings should be aligned at the center of the cell.

Unless specifically required by your event’s guidelines, gridlines should be used.

Example of a Table

Column Heading	Column Heading	Column Heading
Text goes here. It is flush left.	Text goes here	\$100.00
The table is centered on the page. Note that text can take up more than one line.	Text can also go here.	\$200.00
Use gridlines for any table you create.	And so is this.	\$300.00
Make sure you align your decimal places.	And this is, too!	\$400.00

All columns containing text should be left aligned.

The body of the table should be single-spaced.

Include the dollar sign (\$) when showing dollar amounts in columns. All columns containing numbers should be right aligned or decimal aligned.

Tables should be centered on the page horizontally unless otherwise indicated.

The Documentation Portfolio

Resumes (NOT LEAP Resumes!)

Some contests require that a resume be included as part of the documentation portfolio (like Career Prep, for example). This sort resume should not be confused with a LEAP resume which is a completely separate document with a different purpose. This resume is the kind used when someone is looking for a job. When creating a resume, whether for a competition or for job hunting, there are several things to keep in mind:

- Keep the resume clear and readable! Resumes today are ready by optical scanners in helping human resource departments screen candidates. Even though a resume in a documentation portfolio won't be scanned at a TSA conference, it's still a good idea to keep a resume clean and simple.
- Use a single, non-decorative font (Arial or Times New Roman are the most common)
- Be sparing in the use of boldface, italics and underlining.
- When it comes to bullets, do not use round hollow bullets as they can be misread by scanners. For example, the hollow bullets could be misread as the lowercase letter "o" or the digit zero. Instead, round, solid bullets should be used.
- Avoid using any shading or boxes on the resume.
- Be careful to not have letters that touch each other. Scanners have trouble interpreting text when characters touch or overlap.
- Do not use ampersands (&) percent signs (%) or foreign characters as the scanner may not read them properly.
- Try not to use lines or other graphic elements on the resumes. Scanners have a tough time translating them.
- Do not use a multi-column format. Scanners read text left to right and cannot distinguish between columns like the human eye can.
- Begin each line at the left margin and do not justify the right margin.

Here is an example of how a resume might look. This is only a sample; there are many other examples on the Internet or from the chapter advisor.

Sample Resume

Johanna S. Bach

123 Main Street
Anytown, US 12345
(555) 555-5555

Objective: A very impressive and convincing objective statement should be written to enrich worth of a resume. Resume objective can be two to three lines in length. Be concise and mention the name of the position you are applying for.

Employment History:

- Company Name, City, State – Month/Year to Month/Year
- Bullet points of job duties go here.
- Bullet points of job duties go here.
- Bullet points of job duties go here.
- Company Name, City, State – Month/Year to Month/Year
- Bullet points of job duties go here.
- Bullet points of job duties go here.
- Bullet points of job duties go here.
- Company Name, City, State – Month/Year to Month/Year
- Bullet points of job duties go here.
- Bullet points of job duties go here.
- Bullet points of job duties go here.

Skills:

- Job related skills will be written here as bullets.
- Job related skills will be written here as bullets.
- Job related skills will be written here as bullets.

Education:

- Degree/Diploma, School, City, State, Year of Degree/Diploma
- Degree/Diploma, School, City, State, Year of Degree/Diploma
- Degree/Diploma, School, City, State, Year of Degree/Diploma

References:

Available Upon Request

Be careful! Don't put your real or identifying information on a resume unless the contest specifically asks for it!

Use common subject headings followed by a colon.

For employment date ranges, be specific for each experience.

List skills that directly relate to the job you are applying for.

Make sure you include all relevant educational experiences, including internships.

Prepare a list of references (at least 3 and include all contact info) ahead of time just in case the interviewer asks for them.



The Documentation Portfolio

References/Sources/Works Cited

Competitors are required to cite the sources of the information used in the creation of their projects. These could range from magazines and newspaper articles, websites, and books. **DO NOT** think that documentation can be created by cutting/copying/pasting from random websites around the Internet - that is plagiarism and it will get a project disqualified faster than anything! The purpose behind research is to take in the information...read it...digest it...analyze it...and even quote it...but it needs to be cited! (And no, www.google.com is not a reference. Google is a search engine. It's the website Google leads to that's the source - and even then, it may not be the original one!)

In TSA documentation, the MLA format (MLA stands for Modern Language Association) must be used. For more information on MLA format, visit this website: www.mla.org/style. For convenience, a quick reference checklist has been created below. The checklist, provided courtesy of FBLA-PBL, shows how each of the various sources should be cited in a References section in a portfolio. (FBLA-PBL Format Guide. Reston, VA. FBLA-PBL, 2014).

References - MLA Style

- **Sample Book Reference:**

Bohlman, Herbert M., and Mary Jane Dundas. *The Legal, Ethical and International Environment of Business*. 5th ed. Cincinnati, OH: Penguin, 1987. Print.

- **Sample Book Reference Without Author:**

The Economist, Princeton Press: Princeton, 1997. Print.

- **Sample Magazine Reference:**

Cohen, Stephen S., and J. Bradford DeLong. "Shaken and Stirred." *Atlantic Monthly* Jan.-Feb. 2005: 112. Print.

- **Sample Magazine Reference without Author:**

"Coca-Cola Paid CEO \$32 Million U.S. in 2007." *Toronto Star* 4 Mar. 2008: B2.

Continued on next page



The Documentation Portfolio

Continued from previous page

- **Sample Internet Reference:**

Thomason, Larisa. HTML Tip: Why Valid Code Matters. Webmaster Tips Newsletter. Dec. 2003. NetMechanic. 6 Jan. 2008 <www.netmechanic.com/news/vol6/html_no20.htm>.

- **Sample Encyclopedia:**

Nazi Party. New Encyclopedia Britannica. New York: Somerset, 1997 ed.

- **Sample Interview Reference:**

Chirac, Jacques. Interview by John Smith. Time 16 Feb. 2003. 10 Oct. 2005 www.time.com/time/europe/magazine/2003/0224/cover/interview.html

- **Sample Booklet/Pamphlet Reference:**

Diabetes Care: Blood Glucose Monitoring. Burnaby, BC: LifeScan Canada, 1997.

- **Sample DVD Reference:**

Encarta 2004 Reference Library. CD-ROM. Microsoft, 2003.

- **Sample Radio/Television Reference:**

“New York Museum Celebrates Life of Einstein.” By Martha Graybow. Reuters, New York. WBFO, Buffalo. 13 Nov. 2002.

- **Sample Government Pubs Reference:**

United States. National Council on Disability. Carrying on the Good Fight Summary Paper from Think Tank 2000- Advancing the Civil and Human Rights of People with Disabilities from Diverse Cultures. Washington: GPO, 2000.





Colorado Technology Student Association

2017-2018 State Competitive Events Guide

Updated 9/22/2017



Catapult Design

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

I. OVERVIEW

Participants design and produce a working catapult, within specified guidelines, that is adjustable and propels hollow plastic practice golf balls (weighing about 14.5 grams each) at a scoring target between 15' and 25' away.

II. ELIGIBILITY

Participants are limited to three (3) teams of up to four (4) individuals per state.

III. TIME LIMITS

- A. Entries must be started and completed during the current school year.
- B. The catapult and design portfolio must be picked up at the designated time at the conclusion of the event.

IV. PROCEDURE

- A. Participants check in their entries at the time and place stated in the conference program.
- B. Catapults are inspected by evaluators to determine among other things, safety. Catapults that meet all Go/No-Go regulations will be approved for the performance stage of the event. Any unsafe devices will be disqualified. (Unsafe catapults include those with parts that detach during operation or those with a dangerous rotation or throwing motion, either of which could cause harm or damage.) Judges will make a final determination about the operational safety of a catapult.
- C. If an entry's catapult is approved for the performance stage of the event, the entry's design portfolio will be evaluated.
- D. A time sheet will be provided for sign up at check-in.
- E. Students must be present for the performance stage of the event.
- F. Teams will receive a bucket of three (3)-dozen hollow plastic practice golf balls (each weighing approximately 14.5 grams) for the performance stage.
- G. Students must bring and wear safety glasses for this stage of the event.
- H. One (1) team member will use a 25' tape measure for measuring and recording the distance from the catapult to the target as it is set for the given test day.
- I. The team will be given five (5) minutes to adjust its catapult for accuracy to that distance.
- J. Teams will position their catapult ON the "firing line" and wait for the command to fire. No catapult will be allowed to launch if it is NOT on the firing line. Teams need to ensure that the devices is on the line before each shot.



Catapult Design

- K. No test firing of the catapult will be allowed. All testing and calibration should be completed prior to the conference. Teams may have a printed calibration table (see portfolio documentation) present to set and adjust their catapult.
- L. If multiple teams are testing at the same time, their practice golf balls will be marked so as to avoid confusion.
- M. When teams receive their bucket, they are allowed to load the first golf ball and arm the mechanism. They must then wait for the fire command to be given. When the judge gives the fire command, the team has one (1) minute to launch as many practice golf balls as possible, one at a time, to accumulate as many points as possible in their net. Each team must cease firing at one (1) minute. No shots made after time has been called will count.
- N. The center of the scoring net will be approximately 15' to 25' from the launching area; students should use their tape measure to determine the distance to the center of the target in order to adjust their catapult for accuracy to that distance. The scoring net is a golf chipping target and three (3) color-coded scoring sections. The red center target is 10" in diameter, the green is 25" in diameter, and the blue target is 40" in diameter.
- O. Scoring is as follows: red target, 5 points; green target, 2 points; blue target, 1 point.
- P. Hollow plastic practice golf balls must enter the target on the fly and be fully in the scoring net to score points. No points will be earned for bounced-in or half-in/half-out hollow plastic practice golf balls.
- Q. Ties will be broken as follows: 1) the team with the highest score and least amount of hollow plastic practice golf balls in the target, and/or 2) the team with the shortest time recorded to score the most points.
- R. Final ranking will be determined from points earned 1) for the design portfolio and 2) the catapult's performance.
- S. Lack of catapult compliance may result in disqualification.
- T. Team members must collect all hollow plastic practice golf balls once judges complete recording points and before leaving the event area.

It is essential that students and advisors routinely check the TSA website (www.tsaweb.org) for updated information about TSA general rules and competitive event guidelines. This information can be found on the website under Competitions/Competition Updates. When students participate in any TSA competitive event, they are responsible for knowing of all updates, changes, and clarifications related to that event.



Catapult Design

REGULATIONS

- A. Each team must record its research and development process—from inception through testing and modification—to the performance stage for competition. This documentation should be submitted as a design portfolio, complete with sketches, pictures, and descriptions of the calculations, processes, successes, and failures related to the designed catapult.
- B. Documentation materials (comprising the “design portfolio”) are required and should be secured in a clear front report cover. The report cover must include the following single-sided, 8½” x 11” pages, in this order:
 - Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - LEAP Team Resume (HS) or LEAP Response (MS)
 - Table of contents
 - Materials list; one (1) page
 - Details of the research and inspiration to help determine the design for a catapult
 - A design log (that includes testing and adjustment notes) from the start date to the present; pages as needed
 - A firing log, indicating firing tests of the device, along with results of tests and adjustments made after each test.
 - A calibration table, indicating how to configure the device to achieve various distances.
 - **FOR HIGH SCHOOL ONLY:** High School competitors are required to include all calculations (pages as needed) with a copy of the pure formula(s) used, substitutions, and final results with units for:
 - ▶ Initial angle of trajectory
 - ▶ Distance
 - ▶ Initial velocity
 - ▶ Time aloft
 - **FOR MIDDLE SCHOOL ONLY:** Middle School competitors are NOT required to include calculations but are encouraged to do so for extra credit; pages as needed.
 - Sketches and pictures of the design process; pages as needed
- C. Participants must bring and wear safety goggles during the performance stage of the event.
- D. Teams must provide their own tape measure (at least 25’ length).
- E. The catapult may be no larger than 2’ tall x 2’ long x 1.5’ wide.

Catapult Design

- F. The base of the catapult should accommodate the provided ballast. The ballast will be two (2) 20-pound sandbags as shown in the illustration, provided by COTSA on site. Each bag is approximately 11" x 11" x 6".



- G. The catapult must operate completely within the given area; the launch arm may extend beyond the front of the catapult only while launching.
- H. The catapult may have any type of spring mechanism to power the arm, but all parts must be contained within the 2' tall x 2' long x 1.5' wide maximum footprint prior to launch.
- I. The catapult's total weight must not exceed fifteen (15) pounds.
- J. All parts of the catapult must initiate behind the launch line, but parts may extend over the line during and after the last launch.
- K. The catapult cannot have wheels.
- L. The catapult must be made entirely from PVC pipe, with the exception of the launch mechanism, firing mechanism, fasteners, and safety items. These items may be wood or metal and must be constructed in a safe way, so as not to damage the device, the testing area, or cause harm to others.
- M. The following may not be used:
- ▶ Glass
 - ▶ Flammable, corrosive, or explosive materials
 - ▶ Compounds that produce odors or gases
 - ▶ Metal (other than for the launch mechanism, firing mechanism, fasteners, and safety items)
- N. The catapult must have at least a five (5)-foot pull cord to launch from a safe distance.
- O. When the catapult is on display or not in the performance stage, it must be fully disabled and unable to be readied for firing.



Catapult Design

- P. Catapult Go or No-Go Compliance - A catapult that receives a “No” answer to any of the requirements below will not advance to the performance stage of the event.
- Is LEAP Team Resume (HS) or LEAP Response (MS) present in the documentation portfolio? (Yes/No)
 - Does the team have safety goggles? (Yes/No)
 - Can the catapult be weighed down with a sand bag? (Yes/No)
 - Is the catapult within the size specifications? (Yes/No)
 - Is the catapult built with the correct materials? (Yes/No)
 - Does the catapult launch with a pull cord? (Yes/No)
 - Does the catapult have a safe launching mechanism? (Yes/No)
 - Is the catapult safe to operate? (Yes/No)

VI. EVALUATION

Evaluation is based on the portfolio and points earned for the catapult’s performance. Please refer to the official rating form for more information.



Participant/Team ID# _____

CATAPULT DESIGN			
2017-2018 OFFICIAL RATING FORM		HIGH SCHOOL	
Go/No Go Specifications			
Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.			
<input type="checkbox"/>	Team members must have safety goggles		
<input type="checkbox"/>	The catapult can be weighed down with supplied sand bags.		
<input type="checkbox"/>	The catapult is the correct size		
<input type="checkbox"/>	The catapult is built with the correct materials		
<input type="checkbox"/>	The catapult launches with a pull cord.		
<input type="checkbox"/>	The catapult has a safe launching mechanism		
<input type="checkbox"/>	The catapult is safe to operate		
<input type="checkbox"/>	Completed LEAP Team Resume (HS) or LEAP Response (MS) is present		
<input type="checkbox"/>	ENTRY NOT EVALUATED		
Design Portfolio			
CRITERIA	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Portfolio (X1)	Portfolio is unorganized and/or missing three or more components.	Portfolio has most components, and it is somewhat organized.	One or no components are missing in the portfolio, and content and organization are clear.
Research (X1)	There is little evidence of research to help determine the design for a catapult.	Some research is present to help determine the design for a catapult.	Ample and thorough research to help determine the design for a catapult is evident.
Design log (X2)	Design log lacks information about the design process (including testing and adjustments) for the final catapult.	Design log adequately conveys the design process (including testing and adjustment) for the final catapult.	Design log provides thorough and quality information about the design process (including testing and adjustments) for the final catapult.
Firing Log/Calibration Table (X1)	The firing log is missing or incomplete (showing fewer than 8 test shots); the calibration table is missing or is incomplete	A firing log shows at least 8 test shots; a calibration table is present and shows how to configure the device to reach specified distances.	A detailed firing log is present, indicating adjustments made between shots; a detailed calibration table is present and shows to to configure the device to reach specified distances.

Record scores in the column spaces below.



Sketches and pictures (X1)	Sketches and/or pictures do not help illustrate the design process.	Sketches and/or pictures are appropriate and help illustrate the design process.	Sketches and/or pictures are of excellent quality and thoroughly illustrate the design process.	
Calculations Required for HS; Extra Credit for MS (X1)	There are no calculations present or they are incomplete.	Calculations for initial angle of trajectory, distance, initial velocity and time aloft are present. Base formula is shown, along with substitutions and final answer.	Calculations for initial angle of trajectory, distance, initial velocity, and time aloft is shown; base formula is shown, formula with substitutions, solution shown with final answer and units.	
SUBTOTAL				

Catapult Performance		
	# Hollow Plastic Practice Golf Balls	Score
Red target - 5 points each		
Green target - 2 points each		
Blue target - 1 point each		
PERFORMANCE SUBTOTAL		

Rules violations (a deduction of 20% of the total possible points) must be initiated by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.

Indicate the rule violated: _____

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.) **TOTAL SCORE**

Comments:

I certify these results to be true and accurate to the best of my knowledge.

Evaluator: _____

Printed name: _____ Signature: _____



Chapter Service Project

OPEN TO MIDDLE AND HIGH SCHOOL CHAPTERS

I. OVERVIEW

Colorado TSA chapters engage in a large number of community service projects at the local level, beyond their work with the national service partner. This event is designed to evaluate local chapter activities that benefit the local community and to recognize excellence and professionalism in the area of community service. This event also enables the community to become aware of the outstanding work being performed by the TSA chapter. Semifinalists participate in an on-site presentation.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Each participating chapters should submit their documentation portfolio as a single, multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

II. ELIGIBILITY

This event is open to Middle School and High School Chapters. Entries are limited to one (1) entry per chapter. Although the entire chapter should participate in the chapter service project, a team of three (3) students will represent the chapter in the semifinalist presentation.

III. SPECIFIC REGULATIONS

- A. Entries must be started and completed during the current school year. The service project selected may be one that benefits the American Cancer Society or one of the chapter's own choosing. For a list of ideas for a service project, please visit the Colorado TSA website: <http://cotsa.ccs.edu/volunteer-opportunities/>.
- B. Documentation materials (comprising "a portfolio") are required and should be secured in a clear front report cover and submitted with a prototype of the design. The report cover must include the following single-sided, 8½" x 11" pages, in this order:
 - Title page with the event title, team ID number, the conference city and state, and the year; one (1) page
 - Table of contents; pages as needed
 - A Team LEAP Resume (HS) or LEAP Response (MS)
 - **Introduction** – Chapters should provide a brief description of the community service project. The statement should provide a brief and concise description or overview of the project; one (1) page.
 - **Objectives of the Project** – Objectives of the project should be specific, measurable, action-oriented, relevant to local needs, and time-bound (S.M.A.R.T). Objectives should be revisited at the conclusion of the project to show level of success and to document the impact of the project on the local community; three (3) pages



Chapter Service Project

- **Community Impact** – This section should describe and document the full impact that the project had on individuals, organizations, businesses, industry or the community in general as appropriate to the project. This section should include statistical evidence such as surveys, pre/post test results or data/documentation to prove that the project made a significant difference and can be sustained in the future; pages as needed.
- **School Impact** – This section should describe and document the full impact that participation in the project had on the school community. This section should include statistical evidence such as surveys, pre-/post-test results or data/documentation to show how the project made a difference to some aspect of the school environment or the student population overall; pages as needed
- **Letters of Recognition** - A maximum of five (5) letters from business or industry representatives that recognize the community service contribution and demonstrate the community's awareness of TSA; pages as needed
- **Publicity** - This section should include any newspaper articles, photos or other items that show publicity received during the project. Do not include items the chapter generated to promote participation in the project. TSA must be mentioned in any print article to receive credit. Dates of the article must be within the article or a letter of verification from the editor must be submitted. Photocopies of articles are acceptable. Chapters may also document their efforts to secure publicity by the inclusion of letters from newspapers or TV/radio stations verifying that articles related to the chapter's project have been submitted for publication. This section should also include photos that document events as they were conducted. Photos should be captioned to explain content; pages as needed.

C. Team Presentation

1. Semifinalist teams will be determined based on portfolio review. Only semifinalist teams participate in the on-site presentation.
2. Although all members of a chapter should be involved in the Service Project, only three (3) students will represent the chapter for this presentation. The chapter should prepare a presentation, complete with visual aids (e.g., flip charts, multimedia presentation, etc.) that will provide the judges with an overview of the chapter's community service project, results achieved, and the lessons learned. Presentations should provide a clear sense about the project planning timetable and process — how the project was initiated, organized, implemented, evaluated and celebrated. All three (3) team members must take an active part in the presentation.
3. The presentation shall be 5-7 minutes in length.
4. Participants have five (5) minutes for set-up of equipment/visual aids.
5. At the conclusion of the presentation, the judges will have three (3) minutes to ask questions, including LEAP Leadership questions.



Chapter Service Project

6. After the judges' question time is complete, the presenters have three (3) minutes to remove all equipment and visual aids.
 7. Participant scores are penalized one (1) point per ten (10)-second interval for speaking over or under the allotted time. The same penalty is used for set-up and takedown. Set-up time begins when the participants enter the room and ends when the participants are ready to deliver the presentation; takedown time begins when the presentation is concluded and ends when the participants have all devices/visual aids ready to exit the room. The presentation time begins when the presenters indicate they are ready. A timer/judges will signal the presenters at when they have one (1) minute left, and 30 seconds left.
 8. Teams are encouraged to be creative in their presentations. The use of computer-generated presentations or other visuals is strongly encouraged.
 9. All charts and graphs must be student produced. No commercially produced materials will be allowed. Each team must use at least one visual aid in their presentation (e.g., flip charts, posters, multimedia presentation, etc.).
 10. It is the responsibility of the presenting team to provide any audio/visual equipment needed for the presentation, including a laptop computer and projector. If a participant is using equipment that requires electricity, s/he must bring a 25' extension cord.
 11. A table (approximately six feet [6'] long) will be provided by national TSA for participant use, as needed.
- D. Go or No-Go Compliance - A project that receives a "No" answer to any of the requirements below will not advance in this event.
- Is LEAP Team Resume (HS) or LEAP Response (MS) present in the documentation portfolio? (Yes/No)
 - Does the portfolio contain all the required elements? (Yes/No)

VI. EVALUATION

The entry is evaluated using the following rubric. A project may receive a deduction of twenty percent (20%) of the total possible points results for failure to follow the specifications outlined in the regulations.

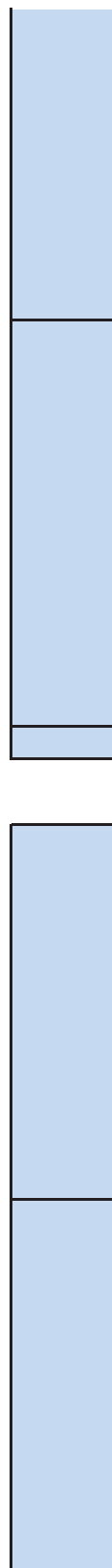


Participant/Team ID# _____

CHAPTER SERVICE PROJECT			
2017-2018 OFFICIAL RATING FORM		MIDDLE SCHOOL & HIGH SCHOOL	
Specifications			
Go/No-Go: Before judging the entry, please ensure that these items are present and place a			
<input type="checkbox"/>	LEAP documentation is present in the documentation portfolio.		
<input type="checkbox"/>	Portfolio includes all the required elements.		
<input type="checkbox"/>	ENTRY NOT EVALUATED		
Project Documentation			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Objectives of the Project	The objectives of the project are not specific, measurable, action-oriented, relevant to local needs and/or time-bound.	The objectives of the project are specific, measurable, action-oriented, relevant to local needs and/or time-bound.	The objectives of the project are clearly stated and highly detailed. Goals are specific, measurable, action-oriented, relevant to local needs and/or time-bound, with specific individuals assigned specific tasks.
Community Impact	The project has little or no impact on the individuals, organizations, businesses, industry, or the community in general. No statistical evidence is provided and/or no evidence is provided that this project can be sustained in the future.	The documentation indicates the project has an impact on the individuals, organizations, businesses, industry, or the community in general as evidenced by documentation. There is evidence to indicate that this project can be sustained in the future.	The documentation includes multiple pieces of evidence (e.g., surveys, documentation, results) indicating the project had a significant impact on the individuals, organizations, businesses, industry, or the community in general. There is detailed evidence indicating this project can be sustained.
School Impact	There is little or evidence that the project had an impact on the school community. There is little or no evidence that the project made a difference to some aspect of the school environment or student population.	There is evidence that the project had an impact on the school community. There is some evidence that the project made a difference to some aspect of the school environment or student population.	There is evidence that the project had a major impact on the school community. There is evidence that the project made a difference to some aspect of the school environment or student population, including surveys, pre/post test results, or other data/documentation.

Record scores in the column spaces below.

Letters of Recognition	There are no letters from community leaders or business and industry personnel recognizing the contribution of the project to the community or demonstrating awareness of TSA.	There are 2-3 letters from community leaders or business and industry personnel recognizing the contribution of the project to the community and or demonstrating some awareness of TSA.	There are 4-5 letters from community leaders or business and industry personnel recognizing the contribution of the project to the community or indicating an awareness of TSA and an understanding the the mission and purpose of the organization.
Publicity	There are few, if any, artifacts showing the publicity the chapter received during the project. TSA may not be mentioned in the artifacts. Efforts to secure publicity may be missing. No photos documenting participation are included.	There are artifacts showing the publicity the chapter received during the project. TSA is mentioned in any print article. Efforts to secure publicity for the project are included. Photos of chapter participation are included.	There are numerous (more than 3) artifacts showing the publicity the chapter received during the project. TSA is mentioned in any print article. Evidence is present that multiple efforts were made to secure publicity for the project. Photos of chapter participation are included and each is captioned to explain its content.
SUBTOTAL			
Presentation			
Effectiveness of Presentation	The presentation is poorly prepared, not interesting, and/or does not make use of visual aids. Presentation is not effective in conveying the meaning and purpose of the service project, and the impact of the project is not discussed or is poorly communicated.	The presentation is adequate, and the observer can generally the meaning and purpose of the service project. The impact on the project is discussed but lacks some detail.	The presentation is exceptional and memorable; the observer can easily understand and relate to the meaning and purpose of the project. The impact on the community and school are clearly defined.
Planning/Timetable	The presentation provides little or no detail regarding the project planning time table (what happens and when) as well as the process (how project was initiated, organized, implemented, evaluated and celebrated).	The presentation provides some detail regarding the project planning time table (what happens and when) as well as the process (how project was initiated, organized, implemented, evaluated and celebrated).	The presentation has great detail on the project planning timetable (what happens and when), as well as the process (how project was initiated, organized, implemented, evaluated and celebrated).





Organization	The presentation is difficult to follow or understand.	The presentation is adequately organized and delivered.	The presentation is organized and easy to follow; the delivery is exceptional.	
Quality of Visual Aids	The visual aids are of minimal quality; are unprofessional and/or inappropriate and do not enhance the content of the presentation.	The visual aids are adequate; they generally relate to the presentation of the service project.	The visual aids are exceptional and enhance the presentation. They clearly enhance the content of the presentation without distracting the observers from the overall content of the presentation.	
Use of Visual Aids	The participants read from the visual aids; the use of the visual aids detracts from the overall presentation; the participants struggle with transitions between aids while delivering the presentation.	The participants tend to rely on the visual aids for much of the presentation; the participants adequately handle transitions between aids while delivering the presentation.	The participants effectively use the visual aids to enhance the overall presentation; transitions between aids are smooth, effective, and well-timed.	
Team Participation	The majority of the interview is made by one member or chapter representative; the other members may be disengaged.	Team members generally are engaged in the process, though one chapter's representative(s) may take on more responsibility than the other(s).	All team members are actively involved in the interview and responses to questions. Each team member can speak to all phases of the project process.	
SUBTOTAL				

Stage Presence			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Appearance	Participants' appearance is unprofessional, sloppy, and inappropriate.	Participants' appearance is adequate, appropriate, and somewhat professional.	Participants' appearance is exceptional, appropriate, and professional.
Confidence	Participants appear nervous during presentation; poor posture, poor eye contact, and lack of confidence are evident.	Participants are generally poised, displays eye contact, and is confident, with little sign of nervousness.	Participants "command" the room, and is exceptionally poised, confident, and positive.



Articulation	Participants convey an inconsistent use of proper grammar, word pronunciation, and acceptable pitch and tone.	Participants generally use proper grammar and pronunciation, and varies the use of tone and pitch.	All three participants have smooth and effective articulation, proper grammar, correct pronunciation, and varied tone and pitch are used throughout the speech.	
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SUBTOTAL				
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LEAP Leadership Resume/Response Interview				
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LEAP Leadership Resume/Interview	The team's efforts are not clearly communicated, lack detail, and/or are unconvincing; few, if any, attempts are made to identify and/or incorporate the LEAP Be. Know. Do. criteria.	The team's efforts are adequately communicated, include some detail, are clear, and/or are generally convincing; identification and/or incorporation of the LEAP Be. Know. Do. criteria is adequate.	The team's efforts are clearly communicated, fully-detailed, and convincing; identification and/or incorporation of the LEAP Be. Know. Do. criteria is excellent.	
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SUBTOTAL				
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Time Penalties				
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One (1) point per ten (10)-second interval is to be deducted for speaking under the three (3) minutes or over the seven (7) minutes allotted for the presentation. The same one (1)-point per ten (10)-second interval penalty applies to more than five (5) minutes for set up and three (3) minutes for take down. Presentation time commences when the presenter begins speaking.

Total time for presentation		Presentation deduction		
Total time for set-up		Set-up deduction		
Total time for take down		Take down deduction		

SUBTOTAL				
-----------------	--	--	--	--

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	TOTAL SCORE	
--	--------------------	--

Comments:

I certify these results to be true and accurate to the best of my knowledge.
 Signature: _____
 Printed name: _____



Colorado Statesman

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

I. PURPOSE

The Colorado TSA Statesman degree recognizes TSA members who excel in knowledge of the organization, its foundation, and its history. Statesman exam is given at the annual State Conference.

II. ELIGIBILITY FOR ENTRY

This event is open to all High School and Middle School TSA members.

III. SPECIFIC REGULATIONS

- A. There is no limit to the number of Colorado TSA members from a chapter who may take the test.
- B. Colorado TSA members may only take the test one time per year.

IV. PROCEDURE

- A. The Colorado Statesman exam will only be given at the annual State Conference during the written testing time period.
- B. All tests are to be completed online at the state conference. Participants must bring their own device (laptop or tablet) capable of connection to the Internet. No cell phones are allowed.
- C. No study material will be allowed in the testing room.
- D. Test questions will be pulled from the National TSA and Colorado TSA websites, the Colorado State TSA Call to Conference, and from Robert's Rules of Order Newly Revised (11th Edition). Test questions may include, but are not limited to: information and history about National TSA, Colorado TSA, state and national programs (e.g., TEAMS, LEAP, etc.), membership information, news and media, awards, history, and basic parliamentary procedure.

VI. EVALUATION

The Colorado Statesman exam will be graded electronically. All competitors receiving a score above 75% will receive a statesman lapel pin and be recognized at the award ceremony of the state conference. Scoring will be handled thus: Those receiving a score of 75-83% will be recognized with a Red Colorado Statesman Award; those receiving a score of 84-92% will be recognized with a White Colorado Statesman Award; those receiving a score of 93-99% will be recognized with a Blue Colorado Statesman Award; and those receiving a score of 100% will be recognized with a Gold Colorado Statesman Award.



Crash Test

OPEN TO MIDDLE SCHOOL STUDENTS

I. PURPOSE

This event is designed to stimulate elementary students' interest in TSA by encouraging middle school TSA members to share their love and interest in technology. For this contest, one elementary student (grades 1-5 or 6 - SEE ELIGIBILITY SECTION BELOW) will work with a middle school student to design and build a "crash test car" that will be tested in multiple head-on and rear-end collisions. The survivability of the passenger, a regular raw egg, will be a determining factor in the car's success.

II. ELIGIBILITY FOR ENTRY

This event is open to Middle School TSA Chapters. Entrants are limited to TEN (10) teams of two (2) students per chapter. Each team MUST have 1 elementary student, and 1 middle school student. Students in 6th grade can be considered elementary students ONLY IF 6th grade is part of the elementary school in which they are currently enrolled. Students in sixth grade who are part of a K-8 or K-12 school would be considered middle school students. Contact the state advisor if there are any questions regarding eligibility.

III. SPECIFIC REGULATIONS

- A. The theme for 2017-18 will be: Recreational Vehicle.
- B. All entries must be designed and constructed before the conference.
- C. Vehicles must be turned into the event coordinator at the beginning of the conference to be displayed. Students may not pick up their vehicles until the end of the conference.
- D. The crash test vehicle:
 - Must comply with the current year's published theme.
 - Must have seating capacity for at least TWO passengers (although only one egg will be used for testing purposes). Seating should be able to accommodate not only the egg, but the "body bag" (Ziploc™ snack size bag) as well.
 - Cannot use pre-made containers for the passenger compartment (for example, Rubbermaid™, Tupperware™, Gladware™ or similar containers). However, portions of the passenger compartment may pre-made (for example, a single cup from an egg carton, or a plastic steering wheel from a model car kit).
 - The safety systems and the vehicle body should not have metal components
 - Must have a windshield through which the driver can be clearly seen.
 - Must have at least one clearly identifiable safety system for occupant protection.



Crash Test

- Must have both front and rear bumpers.
 - Must have a steering wheel within reach of the driver.
 - Must have a reusable way to get the driver in and out of the vehicle after each impact. The egg will be checked for survivability after every crash.
 - Must have a flat bottom with four 1.5” strips of Velcro (the soft side) firmly attached. This will keep the vehicle on the testing sled.
 - Should NOT have any wheels. The wheels are provided in the form of a testing sled. (See attached schematic for the testing sled specifications.)
 - Must be between 3”-4” in width
 - Must be between 7”-12” in length
 - Has no restriction on height.
- E. No commercially produced kits are allowed. The car must be primarily designed and built by the elementary student with guidance from the middle school student.
- F. The vehicle will be placed on a testing sled which will serve as the wheels for the vehicle. A schematic of the sled is provided with these regulations.
- G. The ramp is made from a standard 1” x 10” x 3/4”, with 1” x 2” x 3/4” boards as side rails. The end block is a composite hardwood block 9” wide, 8” high and 6-1/2” thick. It is reinforced on the sides with 3/4” solid wood. The guard rails will assist the vehicle down the ramp, but will NOT prevent the vehicle from leaving the track. A schematic of the ramp is included with these regulations.
- H. A drawing of the vehicle done by the elementary student must accompany the vehicle. It should be as accurate to the final model as possible.
- I. The elementary student should be the primary lead in the design and construction of the vehicle.
- J. The middle school student must present a portfolio documenting the project. The portfolio should include:
- Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - Table of contents
 - LEAP Response



Crash Test

- Design drawings (hand-drawn sketches or computer generated drawings)
- Photos of the project
- An essay describing the project and each person's part in it
- A time log documenting the time spent with the elementary student on the project.

IV. PROCEDURE

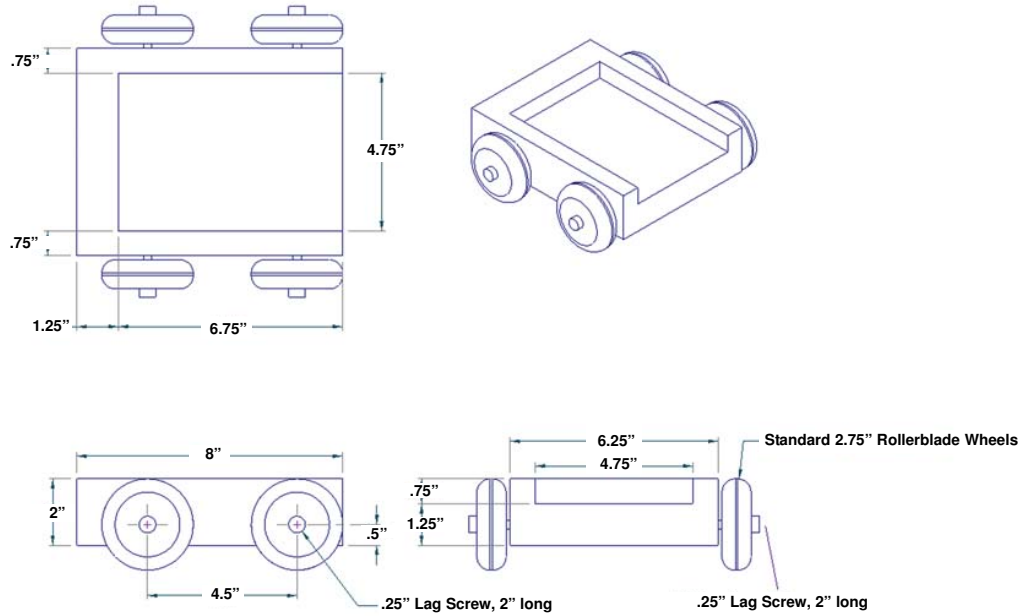
- A. Participants will turn in their vehicles and design briefs to the display area at the beginning of the conference.
- B. At the time of testing, each vehicle will be given a single, raw egg and a “body bag” (a single snack-sized Ziploc™ bag) to contain any potential egg innards should the shell crack during testing.
- C. The sled, with the car attached, will be rolled down the testing ramp. At the end of the ramp will be a barrier (which may or may not have protrusions) into which the car will crash.
- D. After the car has impacted the barrier, the egg must be removed to check for cracks. If the egg is broken, the crash was unsuccessful and testing will be stopped. If the egg remains unbroken, testing will continue.
- E. The starting edge of the ramp will begin at 4' from the floor. After each successful test, the starting edge of the ramp will be raised 2', until the ramp is near vertical. If the vertical test is successful, the ramp will be lowered back to the 4' level and the car will be repositioned BACKWARDS on the sled and the tests will be repeated. If the backwards test is successful, the ramp will be lowered back to the 4' level and the car will be repositioned forwards on the sled and the tests will be repeated with unknown “Road Obstacles.”
- F. Testing of the vehicle ends with either a cracked egg or completion of both forward and backward trials, whichever comes first.
- G. Vehicles will be returned to the display area at the end of the competition.
- H. Go or No-Go Compliance - A vehicle that receives a “No” answer to any of the requirements below will not advance to the performance stage of the event.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)

VI. EVALUATION

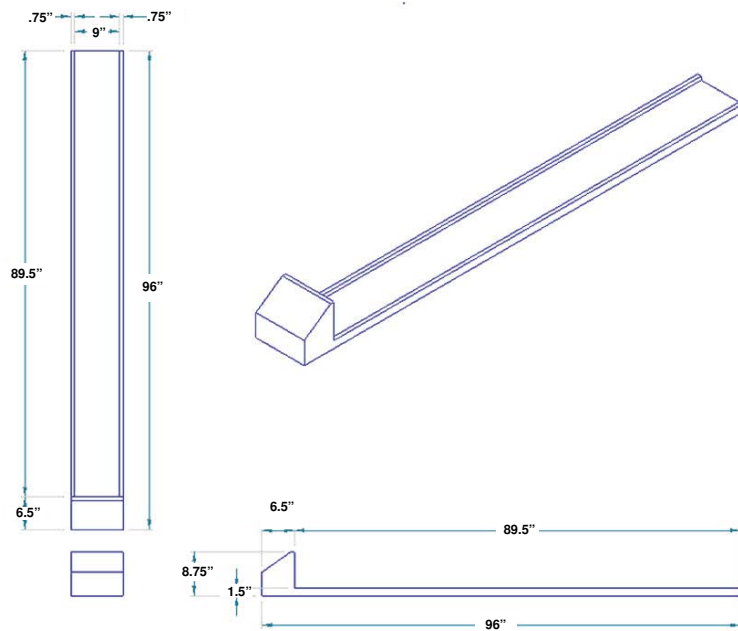
Each vehicle will receive points based on how many impacts the car is able to withstand, the accuracy of the drawing, and on the design portfolio. The following rubric will be used. In the event of a tie, ranking will be determined by the most innovative design. The Event Coordinator will make this determination.

Crash Test

SCHEMATICS - CRASH TEST SLED



SCHEMATICS - CRASH TEST RAMP





Participant/Team ID# _____

CRASH TEST			
2017-2018 OFFICIAL RATING FORM		MIDDLE SCHOOL	
Go/No-Go Specifications			
<p>Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.</p>			
<input type="checkbox"/> Completed LEAP Response is present			
<input type="checkbox"/> ENTRY NOT EVALUATED			
<p>Survivability: Award points based on how high the car got BEFORE the egg cracked (e.g., if the egg cracked after a crash on step 5, award the points for step 4.)</p>			
Forward-facing height	4-feet = 5 points	6-feet = 10 points	Vertical Drop = 15 points
Backward-facing height	4-feet = 5 points	6-feet = 10 points	Vertical Drop = 15 points
Forward-facing height w/obstacles	4-feet = 5 points	6-feet = 10 points	Vertical Drop = 15 points
Specifications			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Drawing	Drawing is not neat, does not reflect design of the car, or is missing. Not to scale. Measurements aren't included.	Drawing is neatly prepared and accurately reflects the design of the car, but is not to scale. Measurements are included.	Drawing is neatly prepared and accurately reflects the design of the car. The drawing is to scale. Measurements are included.
Portfolio	Portfolio is missing three or more items or is not present.	Portfolio is missing one of the following: documentation proving the elementary student was the primary lead in the design and construction; photos, essay describing the project and each person's part in it, or a time log documenting time spent with the elementary student.	Portfolio is complete with documentation proving the elementary student was the primary lead in the design and construction of the vehicle. Photos of the project are included as well as an essay describing the project and each person's part in it. A time log documenting the time spent with the elementary student on the project is included.

Record scores in the column spaces below.



Design Specs - Construction	The car meets design specs for height, width and length. It fits on the test sled properly.	The car doesn't meet one of the design specs for length, width or height, or may not fit test sled.	The car does not meet three or more design specs for length, width or height, or does not fit the test sled.	
Design Specs - Construction - Part II	The car has seating for at least 2 passengers. Car has unobstructed view through the windows. Steering wheel is accessible by the driver.	The car has seating for at least two passengers. There may be an obstruction of the windows or controls may not be accessible by the driver.	The passenger area does not provide comfortable seating. There is an obstruction of the windows and the controls are not accessible by the driver.	
Design Specs - Appearance	The car has a clear windshield, front and back bumpers, a steering wheel and more than one safety system.	The car is missing one of: a clear windshield, front and back bumpers or a steering wheel. There is only one safety system.	The car is missing three or more of the following: a clear windshield, front and back bumpers or a steering wheel. There is no safety system.	
Design Specs - Appearance	The car is neatly done, using a proper amount of glue, tight fitting pieces, and cuts are clean. Car is painted well. The car follows published theme.	Car is neatly done, but there is one need for improvement: glue usage, tight fitting pieces, or clean cuts. Car is painted or decorated. Follows theme.	Car has needs for improvement in three areas: glue usage, tight fitting pieces, or clean cuts. Car is not decorated.	
SUBTOTAL				

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.
 Indicate the rule violated: _____

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	TOTAL SCORE	
--	--------------------	--

Comments:
I certify these results to be true and accurate to the best of my knowledge.
Evaluator: _____ Signature: _____ Printed name: _____



Creativity Challenge - HS

OPEN TO HIGH SCHOOL STUDENTS

I. GOAL

To stimulate elementary students' interest in TSA by encouraging high school TSA members to share their love and interest in technology.

II. PURPOSE

In this ON-SITE event, one elementary student (grades 1-5 or 6 - NOTE: SEE ELIGIBILITY SECTION BELOW) will work with a high school student in an on-site design problem. NOTE: This is a non-competitive event and does not earn points for your school toward the Chapter of the Year award. All High School and Elementary buddies will be recognized at the award ceremony.

III. ELIGIBILITY FOR ENTRY

This event is open to High School TSA Chapters. Entrants are limited to 10 teams of two students per chapter. Each team **MUST** have 1 (one) elementary student, and 1 (one) high school student. Students in 6th grade can be considered elementary students **ONLY IF** 6th grade is part of the elementary school in which they are currently enrolled. Students in sixth grade who are part of a K-8 or K-12 school are considered middle school students. Contact the state advisor if there are any questions regarding eligibility.

III. PROCEDURE/SPECIFIC REGULATIONS

- A. Participants report to the event area at the time/place listed in the conference program.
- B. The teams allowed 1 hour and 30 minutes to design and construct a solution.
- C. Each solution is tested as soon as the construction phase is completed.
- D. All work must be completed in the event area during the time specified for the event.
- E. All materials are provided. Only the materials issued to each team by the event coordinator may be used in the development of the solution.

IV. EVALUATION

Each team's solution is evaluated objectively. A finite measure, such as elapsed time, horizontal or vertical distance, and/or strength, is used to determine the best solution. Solution designs will be used to break ties. Only as a last resort does the event coordinator use subjective measurement, such as originality, to evaluate solutions.



Creativity Challenge - MS

OPEN TO MIDDLE SCHOOL STUDENTS

I. GOAL

To stimulate elementary students' interest in TSA by encouraging middle school TSA members to share their love and interest in technology.

II. PURPOSE

In this ON-SITE event, one elementary student (grades 1-5 or 6 - NOTE: SEE ELIGIBILITY SECTION BELOW) will work with a middle school student in an on-site design problem. NOTE: This is a non-competitive event and does not earn points for your school toward the Chapter of the Year award. All Middle School and Elementary buddies will be recognized at the award ceremony.

III. ELIGIBILITY FOR ENTRY

This event is open to Middle School TSA Chapters. Entrants are limited to 10 teams of two students per chapter. Each team **MUST** have 1 (one) elementary student, and 1 (one) middle school student. Students in 6th grade can be considered elementary students **ONLY IF** 6th grade is part of the elementary school in which they are currently enrolled. Students in sixth grade who are part of a K-8 or K-12 school would be considered middle school students. Contact the state advisor if there are any questions regarding eligibility.

III. PROCEDURE/SPECIFIC REGULATIONS

- A. Participants report to the event area at the time/place stated in the conference program.
- B. The teams allowed 1 hour and 30 minutes to design and construct a solution.
- C. Each solution is tested as soon as the construction phase is completed.
- D. All work must be completed in the event area during the time specified for the event.
- E. All materials are provided. Only the materials issued to each team by the event coordinator may be used in the development of the solution.

IV. EVALUATION

Each team's solution is evaluated objectively. A finite measure, such as elapsed time, horizontal or vertical distance, and/or strength, is used to determine the best solution. Solution designs will be used to break ties. Only as a last resort does the event coordinator use subjective measurement, such as originality, to evaluate solutions.



Fashion Design - MS

OPEN TO MIDDLE SCHOOL STUDENTS

I. PURPOSE

Students have the opportunity to research, develop, and create garment designs, garments, and portfolios that reflect the current year's published theme. Twelve (12) qualifying semifinalist teams participate in an on-site event in which they present their garment designs to the judges.

The theme for 2018 is: "American History." Participants choose a time period or American place that they have studied or will study in middle school. Participants research the traditions and cultural values demonstrated in that era or region.

Participants then design and "create" 3 items that would be worn during that period and place, or even just inspired by it. Participants can create clothing for men or women, of any age.

As part of the presentation, participant teams must explain the significance of the fashion items in the period and place they've studied. Note: These items do not need to be sewn from scratch (although that is allowable) They may be "built" from found items (say, from a thrift store) and modified to fit the design needs. Students are welcome to consider novel and historical methods of building clothing beyond the needle and thread.

II. ELIGIBILITY FOR ENTRY

Entries are limited to two (2) teams of two to four (2-4) members per chapter.

III. TIME LIMITS

- A. Entries must be started and completed during the current school year.
- B. Semifinalists will be allowed ten minutes (10) for a presentation. A deduction of five (5) points will be incurred for exceeding the presentation time limit.

IV. PROCEDURE

- A. Participants check in their entry at the time and place stated in the conference program.
- B. Entries are reviewed by evaluators. Neither students nor advisors are present at this time. A semifinalist list in random order is posted.
- C. The semifinalists report to the event area at the time and place stated in the conference program.
- D. Each semifinalist team must have access to student TSA member models and the team-created fashion items to compete in the semifinals.
- E. Semifinalists sign up for times for presentation. These sessions are OPEN and will take place in front of an audience.



Fashion Design - MS

- F. Semifinalists use the assigned time to present their designs. Models must be present and wearing the fashion items designed by the team. Models must be members of the team's TSA chapter.
- G. Any type of item/garment design that is typical of responsible clothing design and creation is considered appropriate.
- H. During the semifinals, participants will be allowed ten (10) minutes to complete the presentation (two [2] minutes for setup, six [6] minutes for the actual presentation, and two [2] minutes for removal). Points will be deducted from a team's score for exceeding the ten (10)-minute time frame allowed for the presentation.
- I. Final evaluation from judges takes place immediately following the completion of the presentation.
- J. Go or No-Go Compliance - A project that receives a "No" answer to any of the requirements below will not advance to the performance stage of the event.
 - Is a completed LEAP Response present in the documentation portfolio? (Yes/No)

V. REGULATIONS

- A. All work must be completed during the current school year. Participants will use a plastic storage box to submit their portfolio, fashion items, and any accessories that are not placed on hangers or mannequins. (Hangers and mannequins are NOT provided by COTSA).
- B. Documentation materials (comprising "a portfolio") are required and should be placed and secured in a clear front report cover. (The portfolio must be submitted with the garments.) The report must include the following single-sided, 8½" x 11" pages, in this order:
 - Title page with the event title, the conference city and state, and the year; one (1) page
 - Table of contents; one (1) page
 - LEAP documentation (as required)
 - Summary of research; two (2) pages
 - Interpretation of theme; two (2) pages
 - Explanation of the item, the materials used in its creation, textiles used, construction techniques used, etc.; two (2) pages
 - Design process sketches (hand-drawn); five (5) pages
 - References /resources; two (2) pages



Fashion Design - MS

C. Items

- The fashion items must be of presentation quality.
- All designs and items should be appropriate for viewing at the state TSA conference.
- Any portfolio or fashion item that depicts inappropriate or unacceptable designs will be disqualified.
- Only the required number of items should be submitted for evaluation. Additional items, garments, and accessories may be used only in the semifinalist presentation and are not submitted for preliminary judging.

D. The semifinalist portion of the event evaluates the quality of the team's presentation, as well as the team's knowledge and expertise pertaining to the entry in the following areas: overall garment design and originality, theme interpretation, construction techniques, and fabrics used.

VI. EVALUATION

Evaluation is based on points earned for the portfolio and garments, and a presentation. Scores on the portfolio, patterns and garments will determine the twelve (12) semifinalists. Points earned for the presentation will be added to the portfolio score to determine the final ranking of the top ten (10) finalists.



Participant/Team ID# _____

FASHION DESIGN - MIDDLE SCHOOL	
2017-2018 OFFICIAL RATING FORM	MIDDLE SCHOOL
Specifications	
Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.	
<input type="checkbox"/>	Portfolio is complete; no required items are missing.
<input type="checkbox"/>	Portfolio follows the format guidelines
<input type="checkbox"/>	Portfolio is presented in specified report cover
<input type="checkbox"/>	All required garments are included
<input type="checkbox"/>	ENTRY NOT EVALUATED

Portfolio			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Portfolio Components	Some parts of the portfolio are missing; the portfolio is unorganized, messy, and lacks quality.	Most components of the portfolio are present, adequately organized, and average in quality.	All components of the portfolio are included; strong effort and quality of work are evident.
Summary of Research	The summary is too brief and lacks the appropriate details expected for the event.	The summary of the research is sufficient; most of the key details are included.	The summary is organized, clear, and concise, with appropriate and necessary details included.
Interpretation of Theme	The interpretation of the theme is very weak and unconvincing.	The interpretation of the theme is clear, with some appropriate justification.	The interpretation of the theme is clear, concise, and thorough, with convincing justification.
Explanation of garments	The explanation is unclear, poorly organized, and does not accurately describe the garment types.	The explanation is loosely organized, with adequate attempts to describe the garment types and their production.	The explanation is clear, and concise and demonstrates extensive knowledge of garment types and production.
Design Process Sketches	Sketches are poorly executed and lack necessary details in the design process.	Sketches are complete as drawn and include most notations and references to the design process.	Sketches are well executed, organized, and clearly represent the design process.

Record scores in the column spaces below.



Resources/ References	Research is inadequate, with very few credible resources and references provided and/or documented.	Research appears adequate, with most important resources and references adequately documented.	Research is comprehensive, and all resources and references are properly documented.	
SUBTOTAL				

Quality of Garments				
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points	
Effective construction techniques used/evident	Garment construction fails to meet accepted standards and techniques of construction in relation to the fabric selected.	Garment construction meets acceptable standards and construction techniques.	Garments show that a variety of appropriate techniques were used in the construction.	
SUBTOTAL				

Rules violations (a deduction of 20% of the total possible points) must be initiated by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____

Semifinalist On-Site Presentation				
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points	
Organization	Participants seem unorganized and unprepared for the presentation.	Participants are generally prepared for the presentation.	The presentation with the evaluators is logical, well organized, and easy to follow.	
Knowledge (x2)	Participants seem to have little understanding of the concepts in their project; answers to questions may be vague.	Participants exhibit an understanding of the concepts in their project.	Participants show clear evidence of a thorough understanding of the project.	
Articulation	The presentation is full of illogical thoughts that lack clarity.	The presentation is somewhat logical and easy-to-understand and follow.	The presentation provides a clear, concise, and easy-to-follow description of the project.	
Delivery	Participants are verbose, illogical in presenting, and use many "uhs, ums, hmms, etc."	Participants are logical and fairly well spoken, with little use of "uhs, ums, hmms, etc."	Participants are well-spoken, distinct, and clear throughout the presentation.	



Quality of garments on models	The garments do not appear to fit and/or are inappropriate for the person modeling (color, style, textures, etc).	The garments fit neatly and generally are well made for the person modeling.	Garments clearly are made and designed for the model--fitting nicely, with appropriate style, colors, textures, etc.	
SUBTOTAL				

Time violation (a deduction of five (5) points will be incurred for being shorter than 3 three minutes or exceeding the five (5)-minute time limit for the length of the video). Record the deduction in the space to the right.

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)

TOTAL SCORE

Comments:

I certify these results to be true and accurate to the best of my knowledge.

Evaluator:

Printed name: _____ Signature: _____



Fore!

OPEN TO HIGH SCHOOL STUDENTS

I. GOAL

To stimulate elementary students' interest in TSA by encouraging high school TSA members to share their love and interest in technology.

II. PURPOSE

The local parks and recreation department continues its work on renovating the municipal golf course. Prior to the renovation, there was an 9-hole themed miniature golf course which had become dated and unattractive. As part of the renovation, the Department of Parks and Recreation has the opportunity to update the course; they want to design and build an attractive course that is appealing to all of the city's residents and have put out a call for design ideas for a new 9-hole golf course.

Your design team, consisting of one elementary student (grades 1-5 or 6 - NOTE: SEE ELIGIBILITY SECTION BELOW) and one high school student, has been hired to design and develop one hole for the proposed miniature golf course.

III. ELIGIBILITY FOR ENTRY

This event is open to High School TSA Chapters. Entrants are limited to 10 teams of two students per chapter. Each team MUST have 1 elementary student (grades 1-5 or 6), and one high school student.

Students in 6th grade can be considered elementary students ONLY IF 6th grade is part of the elementary school in which they are currently enrolled. Students in sixth grade who are part of a K-8 or K-12 school would be considered middle school students. Contact the state advisor if there are any questions regarding eligibility.

III. SPECIFIC REGULATIONS

Your team will present, drawings of your design creation, a list of necessary materials, a constructed, playable table top model of your creation which was designed and constructed before the conference. The elementary student should be the primary lead in the design and construction of the model.

- A. Golf course holes must be turned into the event coordinator at the beginning of the conference to be displayed. Students may not pick up their models until the end of the conference.



Fore!

B. Portfolio: The high school student must present a portfolio documenting the project. Included in this portfolio should be:

- Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
- Table of contents
- LEAP Team Resume
- A list of materials (including cost)
- Photos of the project
- An short essay describing the golf course hole and each person's part in the project. Included in this essay should be an explanation of how the par of the hole was determined.
- A time log documenting the time spent with the elementary student on the project.
- A colored blueprint/schematic of the hole with all parts clearly labeled.

C. Model

- The golf course hole model must be a playable tabletop model not to exceed 24" x 24".
- The model must include a "tee" area.
- The model must include a cup 1" in diameter.
- The model must include a marble to serve as a miniature golf ball.
- The team must design and develop a "putter" or launch mechanism to hit the ball on the hole.
- The model must include an area where the golf ball disappears from view during the play of the hole.
- The model must include a feature that moves (either on its own - like a windmill - or as the result of the ball moving it - like a revolving door or flap)
- In order to minimize costs, the model should be constructed primarily from recyclable materials.



Fore!

IV. PROCEDURE

- A. Participants will turn in their golf course holes and design portfolios to the display area at the designated time.
- B. Each golf course hole will be demonstrated by the design team. The team's "putter" or launch mechanism will be used to propel the golf ball through the course.
- C. Golf courses will be returned to the display area at the end of the competition.
- D. Go or No-Go Compliance - A vehicle that receives a "No" answer to any of the requirements below will not advance to the performance stage of the event.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)

V. EVALUATION

Each golf course hole will be evaluated using the following rubric. The project will receive points based on the design portfolio prepared by the high school student. In the event of a tie, ranking will be determined by the most economically-produced model. The Event Coordinator will make this determination.



Participant/Team ID# _____

FORE!	
2017-2018 OFFICIAL RATING FORM	HIGH SCHOOL
Go/No Go Specifications	
<p>Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.</p>	
<input type="checkbox"/>	Completed LEAP Response is present
<input type="checkbox"/>	ENTRY NOT EVALUATED

Record scores in the column spaces below.

Specifications			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Portfolio	<p>The portfolio may be missing two or more of the following items and/or the information presented is not complete:</p> <ul style="list-style-type: none"> • A list of materials used in the creation of the hole. • Photographs detailing the work of the TSA member AND the elementary student in the creation of the model. • An essay describing in detail the hole and each person's part in the project. • A time log documenting the time spent with the elementary student. • A blueprint/schematic of the hole will all part/features clearly labeled. 	<p>Portfolio is complete and includes:</p> <ul style="list-style-type: none"> • A list of materials used in the creation of the hole. • Photographs detailing the work of the TSA member AND the elementary student in the creation of the model. • An essay describing in detail the golf course hole and each person's part in the project. • A time log documenting the time spent with the elementary student. • A blueprint/schematic of the hole will all part/features clearly labeled. 	<p>Portfolio is complete and easy to read and is clearly understandable. It includes:</p> <ul style="list-style-type: none"> • A detailed list of materials used in the creation of the hole. • Multiple photographs detailing the work of the TSA member AND the elementary student in the creation of the model. • A short essay describing in detail the golf course hole and each person's part in the project. • A detailed time log documenting the time spent with the elementary student. • A colored blueprint/schematic of the hole will all part/features clearly labeled.



Model	<p>The model is missing three or more items from the following:</p> <ul style="list-style-type: none"> • Fits within the 24" x 24" dimensions • Includes a "tee" area • Includes a cup 1" in diameter • Includes a marble to serve as a ball. • Has a student-developed putter/launch mechanism to hit the ball on the hole. • Is built from recycled materials. 	<p>The model includes/meets all but ONE of the following:</p> <ul style="list-style-type: none"> • Fits within the 24" x 24" dimensions • Includes a "tee" area • Includes a cup 1" in diameter • Includes a marble to serve as a ball. • Has a student-developed putter/launch mechanism to hit the ball on the hole. • Is built from recycled materials. 	<p>The model hole:</p> <ul style="list-style-type: none"> • Fits within the 24" x 24" dimensions • Includes a "tee" area • Includes a cup 1" in diameter • Includes a marble to serve as a ball. • Has a student-developed putter/launch mechanism to hit the ball on the hole. • Is constructed from recycled materials. 	
	<p>The hole makes poor use of the space; design indicates simple two-dimensional design. No special features such as tunnels or uneven topography are included.</p>	<p>The hole adequately uses the space provided; may include one feature such as a tunnel or uneven topography.</p>	<p>The hole takes full advantage of all available space. May include multiple levels or other features (e.g., tunnels or uneven topography).</p>	
	<p>The model is incomplete. Many parts of the model are missing. The hole is not well constructed.</p>	<p>The model is complete but there may be some difference between plans and actual model. Model includes greens, walkways, bumpers, tees, holes, flags and obstacles. Goal is apparent. The hole is well constructed.</p>	<p>The model accurately follows the drawings. The model is complete with greens, walkways, bumpers, tees, holes, flags and obstacles. The goal is readily apparent. The hole is well constructed and neatly presented.</p>	

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.
 Indicate the rule violated: _____

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	TOTAL SCORE
--	--------------------

Comments:
I certify these results to be true and accurate to the best of my knowledge.
Evaluator: _____ Signature: _____ Printed name: _____



Giant Jenga Tournament

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

I. GOAL

To stimulate teamwork and communication skills through a creative problem-solving challenge.

II. PURPOSE

Part of developing a student who will be prepared for the challenges ahead in the 21st century is the development of teamwork and communication skills. Through this competitive event, played in tournament style, teams work to test those leadership skills as they work as a team to build a teetering block tower made of 2x4 blocks as high as possible without having it fall over.

Each of the blocks have been donated by the various TSA chapters in Colorado and may bear some sort of decoration on its edges and ends. The purpose behind having chapters contribute personalized blocks signifies that while each of our TSA chapters may look slightly different, together, we are very similar and all fit together to build a strong organization. Each COTSA chapter is encouraged to submit blocks to the COTSA State Office for this event.

III. ELIGIBILITY FOR ENTRY

This event is open to Middle and High School TSA Chapters. Entrants are limited to three (3) teams of two (2) to four (4) students per chapter.

IV. SPECIFIC REGULATIONS

- A. A Jenga set consists of 54 wooden blocks. Each block is made from a standard 2x4 and is 10.5” long.
- B. The initial Jenga tower has 18 levels of three blocks each. The blocks are placed adjacent to each other along their long side and perpendicular to the previous level (so, for example, if the blocks in the first level lie lengthwise north-south, the second level blocks will lie east-west).
- C. A “move” consists of taking one -- and only one -- block from any level (except the one below the incomplete top level) of the tower, and placing it on the topmost level in order to complete it.
- D. Blocks may be bumped to find a loose block that will not disturb the rest of the tower. Any block that is moved out of place must be returned to its original location before removing another block. The turn ends when the next person to move touches the tower or after ten seconds, whichever occurs first.
- E. The match ends when the tower falls in even a minor way—in other words, any piece falls from the tower, other than the piece being knocked out to move to the top.
- F. The winning team will be the team to successfully remove and place a block without causing the tower to fall or a brick to fall from the tower.



Giant Jenga Tournament

✓ PROCEDURE

- A. The tournament will be bracketed prior to the conference and initial matches will be determined at random.
- B. A coin toss will be made to determine the team that will move first in a match.
- C. Blocks may be bumped to find a loose block that will not disturb the rest of the tower. Any block that is moved out of place must be returned to its original location before removing another block.
- D. The turn ends when the next person to move touches the tower or after ten seconds, whichever occurs first.
- E. The match ends when the tower falls in even a minor way—in other words, any piece falls from the tower, other than the piece being knocked out to move to the top.

VI. EVALUATION

The match ends when the tower falls in even a minor way—in other words, any piece falls from the tower, other than the piece being knocked out to move to the top. The winning team will be the last team to successfully remove and place a block on top of the tower without causing the tower to fall or a brick fall from the tower.



Global Logistics

OPEN TO HIGH SCHOOL STUDENTS

I. OVERVIEW

Participants design, manufacture and package a marketable product through a collaborative effort with two other high school TSA chapters. Each of the 3 chapters involved will be responsible for different tasks and responsibilities, and will collaborate virtually with each other to create and deliver the final product (based on the year's theme) to be shipped in a box with a maximum exterior dimension of 8"x8"x8". There are to be no face-to-face or in person meetings until the presentation of the product at the state conference. The focus of this event is on the manufacturing and communication processes currently standard in industry, teamwork and communication skills through a creative problem-solving challenge.

II. CHALLENGE

A high school TSA chapter, working in conjunction with two (2) other high school TSA chapters, designs, manufactures and packages and delivers a product. Two (2) identical completed products must be included in the display for this event. The emphasis of this event is placed on the processes of manufacturing, packaging, and communication. All collaboration between three teams MUST take place online/virtually, and all chapters must use utilize digital file sharing. There are to be no face-to-face meetings between chapters until the presentation portion of the contest at the conference.

Each chapter will be responsible for a specific portion of the contest; which chapter is responsible for which portion of the contest will be left up to the chapters to decide.

- The chapter that designs the product must not manufacture or package it. The design can be changed based on feedback from the other participating chapters. All design changes must be documented.
- The chapter that manufactures the product must not design it or package it. Discussions between the chapters regarding the manufacturing processes are encouraged and must be documented.
- The chapter that creates the packaging for the product must not design the product or manufacture it. Discussions between the chapters regarding packaging options are encouraged and must be documented.

The theme for 2017-2018 is: A child's toy for children ages 5-8.

III. ELIGIBILITY FOR ENTRY

This event is open only to High School Chapters. Middle school TSA chapters are not eligible to compete in this event.

Entries are limited to one (1) team of three (3) separate High School TSA chapters, with a maximum of six (6) students per chapter. Two (2) representatives per chapter will participate in the interview portion of the contest, for a maximum of six (6) presenters. In the event that a school is unable to attend the conference, the remaining schools can substitute in representatives, for a total of up to six (6) presenters. All six (6) presenting students must be prepared to address all aspects of the process.



Global Logistics

IV. SPECIFIC REGULATIONS

- A. The chapters involved will determine who is responsible for each aspect of the process. Chapters are encouraged to collaborate and work together, but each chapter must have well-defined responsibilities. These responsibilities must be documented.
- B. The chapters design, plan and produce a product, along with packaging suitable for resale (primary packaging) based on the current year's theme. The product must be mailed (secondary packaging) between the three chapters as indicated below. No in-person face-to-face contact should occur between chapters; only virtual or electronic communication is permitted. No products are to be hand-delivered between chapters.
- C. Chapters delegate the following responsibilities for the produced product:
 - o **School A:** Designs the product (3D model, CAD, and other diagrams when required). This school will then send these designs electronically or via USPS or other mail service to one of the other schools involved. All schools may be involved in the design process, as long as all communication is done virtually/electronically through the use of telephone or online tools such as email, video conferencing, website, online document sharing, etc.
 - o **School B:** Manufactures the product (or components of the product, if it is to be assembled by the consumer). The school should use whatever processes, tools, and materials are available and appropriate for the manufacture of the product. This school must collaborate and communicate only virtually/electronic means (e.g., telephone or online tools such as email, video conferencing, website, online document sharing, etc.), with the school(s) that designed the product. This chapter is responsible for creating TWO identical finished products that must be sent to School C for packaging.
 - o **School C:** Designs and create the primary and secondary packaging for the product. This packaging will have two major components that will be evaluated: Aesthetics and Packaging Efficiency. The primary packaging is the package that is designed for display on retail store shelves. The secondary packaging is the container that ships the completed packaged product to the retailer (a.k.a. School A). Secondary packaging must be a standard off the shelf box that is sized correctly for the product to minimize empty/wasted space. No modifications may be made to the standard sized the off the shelf box. This secondary packaging is limited to a maximum size of 8"x8"x8".
 - o It will be up to the schools to determine who takes responsibility for the creation of the display. The display may not exceed 15" deep x 3' wide x 4' high.
- D. Once the two products have been completed and packaged, School C, will ship them SEPARATELY via any standard postal carrier (USPS, FedEx, UPS, DHL, etc.). back to School A.



Global Logistics

E. Upon receiving the two packages, School A must document and photograph the opening and condition of **ONLY ONE** of the products and its packaging. The second package must be left in the sealed, unopened, secondary packaging with postage markings until the interview portion of the contest at the state conference when the judges will open the package. Any package that has been opened and resealed will be disqualified.

F. Documentation Portfolio:

All three chapters on a team will be responsible for the creation of the documentation portfolio. All schools involved should be identified by their State Conference Team ID numbers on the cover page of the document. The documentation portfolio should be submitted electronically as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID# when submitting their entry. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

The documentation portfolio must contain the following in this order:

- o Title page with the event title, the conference city and state, the year, and the chapter ID numbers for each chapter involved; one (1) page
- o Table of contents; pages as needed
- o Team LEAP Resume – A TEAM LEAP resume for EACH CHAPTER must be included.
- o Description of the Product – A written description of the product, along with what aspect of the process each participating chapter was responsible for.
- o Design – Charts, diagrams and/or working/CAD drawings for the design of the product; drawings, photos and sketches of possible designs for the project with final design drawings identified; pages as needed
- o Manufacturing/Assembly Processes – Photographs and descriptions of the individual parts manufactured by the chapter. Description should include materials used as well as a list of equipment used in the creation of the product.
- o Packaging – Photographs and descriptions of packaging design options discussed by chapters for their product; drawings and sketches of possible designs for the project with final design drawings identified equipment and materials used to create primary packaging; photos of packages received before opening should be included; pages as needed
- o Written information about each chapter's involvement in the product design, creation and packaging; two pages maximum
- o Communication log – Documentation of the communication process and methods used (e.g., email, phone, text, Zoom, Skype, etc.). This must be documented via a chronological communication log; pages as needed.



Global Logistics

G. The Display:

- o The display may not exceed 15” depth x 3’ width x 4’ height.
- o The display should document the process used in the design, manufacture, packaging, and shipping of the product.
- o The display must incorporate the use of design principles
- o Two (2) completed projects must be displayed: one (1) in primary packaging; the second package must be in the sealed, unopened, secondary packaging with postage markings until the interview portion of the contest at the state conference when the judges will open the package. Any package that has been opened and resealed will be disqualified.
- o No electricity will be provided.

H. The Interview:

- o All teams will be interviewed at the conference. Both products (both the opened one and the sealed one) are to be brought to the interview.
- o Two (2) representatives per chapter will participate in the interview portion of the contest, for a maximum of six (6) presenters. In the event that a school is unable to attend the conference, the remaining schools can substitute in representatives, for a total of up to six (6) presenters. All six (6) presenting students must be prepared to address all aspects of the process.

EVALUATION

The entry is evaluated on the documentation, product, and an interview. Refer to the official rubric for details. A deduction of twenty percent (20%) of the total possible points results for failure to follow the specifications outlined in the regulations.



Production			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Display	The display does not adequately illustrate the steps involved in the design/manufacturing/ packaging process. The display is not well constructed and/or does not include two completed products (one opened and in primary packaging, and a packaged one one in a sealed, postmarked secondary package).	The display adequately illustrates the steps involved in the design/manufacturing/ packaging process. The display includes two completed products (one opened and in primary packaging, and a packaged one one in a sealed, postmarked secondary package). The display presents the information in a logical format.	The display clearly and creatively illustrates the steps involved in the design/manufacturing/ packaging process. The display is neatly constructed and includes two completed products (one opened and in primary packaging, and a packaged one one in a sealed, postmarked secondary package). Display reflects an exemplary use of layout and design principles.
Product	The cue sheet is sloppy, seems to have been created after the creation of the finished piece and/or it is missing critical elements or does not correlate with the final product.	The cue sheet is included and lists the scenes, action, and music suggestions. May include location and how music links to how the music should fit.	The cue sheet is in proper format, listing the scenes, the action, music suggestions that go with each action, and the location and length in the film into which the music should fit.
Primary Packaging	Primary packaging is messy or poorly constructed. Packaging does not fit product well. Design is not appealing for retail shelves.	Primary packaging is adequate. Product fits well, and is somewhat appealing for display on retail store shelves.	Primary packaging is neatly designed and well constructed. Packaging design complements product and is very appealing for display on retail store shelves.
Secondary Packaging	Secondary packaging exceeds the 8" x 8" x 8" dimension. There is excess wasted space inside the box. Packing/filling material is either excessive for the product or is insufficient to protect the product during transport.	Secondary packaging meets 8" x 8" x 8" dimensioning. There may be some wasted space inside the secondary package; packing/filling material is not excessive and allows for adequate protection of primary package/product.	Secondary packaging meets 8" x 8" x 8" specifications and there is little or no wasted space inside. Packing/filling material is used judiciously and completely protects the primary package/product.
SUBTOTAL			

Interview			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Knowledge	Participants seem to have little understanding of the concepts in their project; answers to questions may be vague.	Participants exhibit an understanding of the concepts in their project.	Participants show clear evidence of a thorough understanding of the concepts in their project.
Articulation	The interview is full of illogical thoughts that lack clarity, and/or there is insufficient information provided describing the project.	The interview is somewhat logical, generally easy to follow, and/or there is sufficient information provided describing the project.	The interview is clear, concise, and there is ample information provided describing the project.
Team Participation	The majority of the interview is made by one member or chapter representative; the other members may be disengaged.	Team members generally are engaged in the process, though one chapter's representative(s) may take on more responsibility than the other(s).	All team members are actively involved in the interview and responses to questions. Each team member can speak to all phases of the project process.
LEAP Leadership Resume/Interview	The team's efforts are not clearly communicated, lack detail, and/or are unconvincing; few, if any, attempts are made to identify and/or incorporate the LEAP Be. Know. Do. criteria.	The team's efforts are adequately communicated, include some detail, are clear, and/or are generally convincing; identification and/or incorporation of the LEAP Be. Know. Do. criteria is adequate.	The team's efforts are clearly communicated, fully-detailed, and convincing; identification and/or incorporation of the LEAP Be. Know. Do. criteria is excellent.



Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event.
Record the deduction in the space to the right.
Indicate the rule violated: _____

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)

TOTAL SCORE

Comments:

I certify these results to be true and accurate to the best of my knowledge.

Signature:

Printed name:



Mousetrap Tractor Pull

OPEN TO MIDDLE SCHOOL STUDENTS

I. PURPOSE

To allow students to demonstrate their ability to design and construct a vehicle powered only by a standard mousetrap spring, to pull as much weight as possible.

II. ELIGIBILITY FOR ENTRY

This event is open to Middle School TSA chapters. Entrants are limited to SIX (6) per school.

III. SPECIFIC REGULATIONS

- A. All entries must be designed and constructed before the conference.
- B. Vehicles must be turned into the event coordinator at the beginning of the conference to be displayed. Students may not pick up their vehicles until the end of the conference.
- C. A documentation portfolio must be submitted with the vehicle at project check-in. The portfolio should include:
 - Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - Table of contents
 - LEAP Response
 - Design drawings for the mousetrap vehicle detailing each part with basic dimensions. These sketches are to be completed on 8-1/2" x 11" paper.
- D. Although the mousetrap may be altered, a standard mousetrap spring may be the only power source for the vehicle. The mousetrap spring must accompany the vehicle the full length of the track. Only a standard mousetrap may be used. No rat traps.
- E. Vehicle Specifications:
 - The vehicle may be no longer than 16" at any time during the pull.
 - The vehicle may be no wider than 10" at any time during the pull.
 - The vehicle must have a fixed hook or eye in which a cup hook may be attached. It should be centered in the very back and 1/2" above the ground.



Mousetrap Tractor Pull

- F. The track is a total of 4 feet long, consisting of a 1-foot long staging area, a 2-foot long pulling area, and a 1-foot long finishing area. The leading edge of the weight sled will be positioned at the starting line with the vehicle in the pulling area. When released, the vehicle must pull the dead weight sled the complete distance of the pulling area (2 feet). If the vehicle fails to pull the weight, the trial ends.
- G. The surface that both the vehicle and the sled will travel on will be bare wood.
- H. The 'sled' will be a wooden device in which weight can be loaded. The weight sled may not be lifted at any time during the pull.
- I. No kits are allowed; the participant must create the vehicle from scratch.

IV. PROCEDURE

- A. Participants will turn in their vehicle to the display area at the beginning of the conference.
- B. Each vehicle will be given the opportunity to pull an appropriate starting weight. Those that successfully pull that given weight will then enter Round 2. The process will be repeated with weight being added to the sled in each round until only one vehicle remains.
- C. Participants must launch their own vehicles.
- D. Go or No-Go Compliance - A vehicle that receives a "No" answer to any of the requirements below will not advance to the performance stage of the event.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)
 - Does the vehicle meet all the stated specifications? (Yes/No)

V. EVALUATION

The following rubric will be used to evaluate the vehicle. In the case of a tie, ranking will be determined by the most innovative design. The Event Coordinator will make this decision.



Participant/Team ID# _____

MOUSETRAP TRACTOR PULL			
2016 OFFICIAL RATING FORM		MIDDLE SCHOOL	
Go/No Go Specifications			
<p>Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.</p>			
<input type="checkbox"/> Completed LEAP Response is present			
<input type="checkbox"/> ENTRY NOT EVALUATED			
Pulling Trials: Record information about the trials.			
Trial 1 - Weight _____	Trial 2 - Weight _____	Trial 3 - Weight _____	
Trial 4 - Weight _____	Trial 5 - Weight _____	Trial 6 - Weight _____	
Trial 7 - Weight _____	Trial 8 - Weight _____	Trial 9 - Weight _____	
Trial 10 - Weight _____	Trial 11 - Weight _____	Trial 12 - Weight _____	
Trial 13 - Weight _____	Trial 14 - Weight _____	Trial 15 - Weight _____	
Trial 16 - Weight _____	Trial 17 - Weight _____	Trial 18 - Weight _____	
Trial 19 - Weight _____	Trial 20 - Weight _____	Trial 21 - Weight _____	
Trial 22 - Weight _____	Trial 23 - Weight _____	Trial 24 - Weight _____	
<p>Calculate points for pulling trials: Multiply the # of the highest successful trial by 2 (e.g., Trial 16 = 16 x 2 = 32 = Total Trial Points)</p>			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Drawing	Drawing is not neat, is not on 8.5" x 11" paper, is not accurate, or is missing. It is not to scale. Measurements are not included.	Drawing is neatly prepared on 8.5" x 11" paper and accurately reflects the design of the vehicle, but is not to scale. Measurements are included.	Drawing is neatly prepared on 8.5" x 11" paper and accurately reflects the design of the vehicle. It is to scale. Measurements are included.
Design Specs - Overall	The vehicle does not meet two or more design specs for length, width, or height or does not have a hook for pulling the sled.	The vehicle does not meet one of the design specs for length, width or height, or the fixed hook is not properly positioned.	The vehicle meets design specs for height, width, and length. It has a fixed hook properly positioned at the back of the vehicle.
Design Specs - Mousetrap	The vehicle is not powered only by a single, standard mousetrap.	N/A	The vehicle is powered only by a single, standard mousetrap.
Design Aesthetics	The vehicle has two or more needs for improvement: glue usage, tight fitting pieces, and cuts are clean. Vehicle is not decorated or themed.	The vehicle is neatly done, but there is one need for improvement: glue usage, tight fitting pieces, and cuts are clean. Vehicle is painted or decorated. Theme is not clear. Theme/decoration may occasionally interfere with operation of the vehicle.	The vehicle is neatly constructed, using a proper amount of glue, tight fitting pieces, and cuts are clean. Vehicle is decorated/themed. Theme/decoration does not interfere with operation of vehicle.
			SUBTOTAL

Record scores in the column spaces below.



Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.
Indicate the rule violated: _____

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)

TOTAL SCORE

Comments:

..... I certify these results to be true and accurate to the best of my knowledge.

Signature:

Printed name:



On-Demand Video Challenge - MS

OPEN TO MIDDLE SCHOOL STUDENTS

I. PURPOSE

Participants use video skills, tools, and processes to communicate, entertain, inform, analyze and/or illustrate a topic, idea, subject, or concept. Participants demonstrate their abilities and skills in the field of impromptu digital videography.

II. ELIGIBILITY FOR ENTRY

This event is open to Middle School TSA Chapters. Entries are limited to one (1) team of 2-6 students per chapter.

III. SPECIFIC REGULATIONS

- A. Entries must be started and completed during the conference.
- B. Participants must submit LEAP documentation when turning in the completed video at the conference.
- C. The video must be 30-60 seconds in length.
- D. Participants will be given 24-hours to develop a storyboard and script based on a prompt given on site as well as collect video footage from the current state conference for use in the final video.
- E. Participants may NOT use stock footage, clips/footage prepared prior to the conference for the final project. All video footage must be the original work of the team and must have been completed during the event timeline.
- F. Participants may only use Royalty Free music or music of their own creation for their solution. Identification of this music must be included in the script and storyboard. In some cases, music may be provided by TSA as part of the problem. Should students create their own music for the production, it must be identified as such in the script and storyboard.
- G. Participants may solicit other chapter or conference participants to assist in collecting footage for their final solution, but only the registered participants are permitted to edit the final solution.
- H. Participants must submit the following on a flash drive (marked with the TEAM ID NUMBER) at the time and place indicated in the conference program:
 - The final video is saved as an AVI, MOV, MPG, MP4, or WMV file on a flash drive.
 - A copy of the script
 - A copy of the storyboard



On-Demand Video Challenge - MS

- The original on-demand video challenge release forms signed by individuals appearing in the production.
 - NOTE: The video must be playable from the flash drive. If the movie does not open or play, the entry will be disqualified
- I. All entries/flash drives become the property of Colorado TSA and will not be returned after judging.
 - J. Teams may use no more than one (1) video camera for the video production.
 - K. Teams must edit their projects on a nonlinear editing system or their camera. Teams are responsible for providing their own editing and camera equipment.

IV. PROCEDURES

- A. Participants report to the event area at the time and place stated in the conference program.
- B. The event coordinator distributes the materials, information, directions, and deadlines to each team.
- C. Each team supplies its own video production and editing equipment that it wishes to use to complete its production. Entries will be submitted on a single USB flash drive for viewing on a personal computer.
- D. Entries are reviewed by evaluators. Neither students nor advisors are present at this time.
- E. Participants shoot their footage, which must be appropriate for the TSA community, only at officially sanctioned conference locations as described by the event coordinator. Teams are not allowed to shoot in sleeping rooms, restrooms, restaurants, or elevators/escalators. Participants may not disturb any event in progress, enter a restricted evaluation area, interrupt a conference function, or participate in behavior unbecoming to a conference participant. When the on-site prompt is picked up, the teams will be given any restrictions regarding filming on the specific property. Failure to follow these instructions will result in disqualification.
- F. Go or No-Go Compliance - A video that receives a “No” answer to any of the requirements below will not advance to the performance stage of the event.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)

V. EVALUATION

Evaluation is based on the completed video production and the accompanying documentation. Depending on the stated purpose, videos are judged on story concept, artistic and/or social value, camera technique, transition and video pace, as well as technical attributes, creativity and organization, and the overall effect of the solution. The video should also incorporate the specified items (props, dialogue, music, etc.) as presented at the on-site problem.



On-Demand Video Challenge - MS

TSA ON DEMAND VIDEO CHALLENGE CONSENT AND RELEASE

I hereby give permission for images of my child or myself (as applicable), captured during Technology Student Association (TSA) activities through film, photo or digital camera, to be used solely for the purposes of TSA promotional materials and publications, and I waive any rights of compensation or ownership thereto.

Name of minor in images/video (please print)

Name of minor's parent/guardian (please print)

Name of adult in images/video (please print)

Parent/guardian or adult's signature (as applicable)

Date



Aesthetics & Artisanship	The work is unorganized and sloppy; the display seems to be an afterthought, as if it were thrown together.	The work provides an organized presentation of essential issues in a logical format.	The work provides an exemplary use of layout and design principles to logically communicate important data.	
Used of required elements	Required elements incorporated in the video appear as an afterthought.	Required elements used in the video add some artistic value and tend to further the story being told.	Required elements are integral to the production's story and artistic value.	
SUBTOTAL				

Time violation (a deduction of five (5) points will be incurred for being shorter than 30 seconds or exceeding the sixty (60)-second time limit for the length of the video). Record the deduction in the space to the right.	
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Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____	
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(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	TOTAL SCORE	
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Comments:
I certify these results to be true and accurate to the best of my knowledge. Signature: _____
Printed name: _____



Pin Design

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

OVERVIEW:

A long-standing tradition at the national TSA conference has been the trading of state-specific lapel pins. In this competition, participants will design a color lapel pin that can be used by Colorado TSA to exchange at the next national conference. Winning pin designs will be developed into trading pins for the upcoming national TSA conference.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit their entries as a single, multi-page PDF document via our upload form located at <http://goo.gl/hwsZvC> by February 1, 2018. Participants will need to enter their STATE CONFERENCE ID# when submitting an entry. Entries not submitted electronically or are not received by the deadline will NOT be considered for competition.

I. PURPOSE

Provide a means for TSA members to demonstrate their ability to communicate design and layout skills.

II. ELIGIBILITY FOR ENTRY

Entries are limited to 1 per student. Open to HIGH SCHOOL and MIDDLE SCHOOL students.

III. SPECIFIC REGULATIONS

- A. The pin design is an individual event. No recognition will be given for a group effort.
- B. Only one entry per student is eligible for competition. If a student submits more than one entry, the first submission will be the one considered for competition.
- C. The entry must be started and completed during the current school year.
- D. The design must be a color computer-generated design. Hand-drawn designs will be disqualified.
- E. When submitting a design, contestants should prepare a single, multi-page documentation portfolio in PDF document (8.5" x 11") that includes:
 - Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - Table of contents
 - LEAP documentation (HS Individual Resume or MS LEAP Response)



Pin Design

- **Design:** A single page showing the design in both actual size (not to exceed 1-1/4" x 1-1/4") and an enlarged version (not to exceed 6" x 6") to show detail. The design may be presented either in portrait or landscape layout. (Please note that the actual pin size may not exceed 1-1/4" in any direction. Contestants are reminded that the size and number of letters in the design should be taken into consideration; a letter on a 10" piece of paper will be reduced to 1/10" on a 1" pin. Therefore, fewer letters and greater size is recommended for a more decipherable pin.) This page should also include the contestant's individual ID number. Nothing else should appear on this page. This page will be printed by the state office and displayed at the state conference.
 - **Description:** A one (1) page description of the design process (including research efforts, design plans, creation process and self evaluation). This would include an explanation of the designer's inspiration. This description should also include software programs used, artwork/graphic/photo sources used in the production of the graphic.
 - **References:** All entries must be the original work of the participant. Computer generated type fonts and public domain computer clip-art may be used. All ideas, text or images from sources other than the designer must be cited (copyrighted or not). Cited works should be in MLA format (see the Documentation Style Guide in this book for formatting examples!).
 - **Letters of Permission:** If copyrighted material is used, separate written permission must be included as well. Failure to follow this procedure will result in disqualification. If the artwork is completely original, this must be stated in the description.
- F. The PDF document is then to be submitted ELECTRONICALLY via our submission upload page at: <http://goo.gl/hwsZvG>. Participants will need to enter their contestant ID# and a contact email address.
- G. All submissions are to be received by 11:59 p.m. FEBRUARY 1, 2018.
- H. The pin must include the official TSA logo letters, the Colorado TSA logo or the official TSA logo. The TSA emblem can be used only in accordance with trademark policies that appear on the national TSA website (www.tsaweb.org). From the homepage, click on About TSA and then Trademark Policies. The TSA logo may be used with or without the registered trademark symbol (the circle R).
- K. The pin design must also represent the state in some way - either through theme, shape, colors or subject (e.g., mountains).
- L. All entries in this event become the property of Colorado TSA and may or may not be used in future promotional materials and publications. Colorado TSA reserves the right to modify the winning designs for production purposes.



Pin Design

V PROCEDURE

- A. **Registration:** Event participants must register and follow the guidelines for the event in accordance with the procedures established for the conference.
- B. ALL designs must be submitted electronically in PDF format to be considered for competition.
- C. **Go or No-Go Compliance** - A video that receives a “No” answer to any of the requirements below will not advance to the performance stage of the event.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)

V EVALUATION

- A. Middle School level and High School level winning designs will be recognized at the awards ceremony. However, winning pin designs may or may not be selected to be the pins that represent Colorado as the trading pins at national competition. A Middle School and a High School pin will be produced for trading at the national conference.
- B. Copies of previous winning pin designs shall not be used.
- C. The following rubric will be used in the evaluation of entries.



Participant/Team ID# _____

PIN DESIGN			
2017-2018 OFFICIAL RATING FORM		MIDDLE & HIGH SCHOOL	
Go/No Go Specifications			
<p>Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.</p>			
<input type="checkbox"/> Completed LEAP Resume (HS) / LEAP Response (MS) is present			
<input type="checkbox"/> ENTRY NOT EVALUATED			
Specifications			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Inspiration for Graphic Design	Little or no discussion of the inspiration for the graphic is included; no, or illogical, order of the design process is evident.	General overview of the design process is included, as is a basic description of the inspiration for the graphic.	An organized and logical overview of the entire design process, which details inspiration for the graphic design, is included.
Design Process	Explanation does not discuss the technical development of the graphic; software packages used are not mentioned; frequent grammar and spellings errors are evident; MLA format is not used, and/or the citations are inadequate.	General overview of the technical development of the graphic (which mentions by name the primary software packages used in the design) is included; a few grammar and spelling errors are evident; MLA format is used for an adequate number of resources.	Detailed and concise description of the technical development of the design (with discussion of all software packages used in the design) is included; proper grammar and spelling are evident; MLA format is used for the citations.
Relevance	Brief and weak explanation of how the graphic design correlates to the challenge is included, and/or the explanation is illogical.	The challenge is discussed in the explanation, but questions arise in trying to understand the correlation between the challenge and the design.	Explanation of relevance (i.e., how the final graphic design relates to the challenge) is clear and complete.
First Impression of Graphic	Design is messy and/or damaged; it includes three (3) or more of the following: dull/rough edges, hard to read fonts, smudges, smears on the graphic, extraneous markings.	Design has several good points, but some details detract from the overall quality; it includes two (2) or fewer of the following: dull/rough edges, hard to read fonts, smudges, smears on the graphic, extraneous markings.	Graphic is striking, elegant and includes one (1) or none of the following: dull/rough edges, hard to read fonts, smudges, smears on the graphic, extraneous markings.
Usefulness	Graphic has no correlation to the state TSA affiliate it is intended to relate to; design does not work for the intended purpose.	Design generally works for its intended purpose, but it may be a little too big or too small in size; design correlates to the intended state TSA affiliate.	The design is a perfect size for the intended purpose; there is strong evidence for correlation of the design to the TSA affiliate.
Dominance	Eyes are drawn away from what should have been focal point by some other component of the graphic.	An attempt is made to use a graphic component that will draw attention to the design's main idea, but the result is confusing.	The design's main components draw eyes to the appropriate location and/or focal point of graphic.
Balance and Proportion	Design seems unbalanced; too little and/or too many graphic elements are included, and they are out of proportion.	Design is somewhat balanced but some graphic elements are too large and/or too small; the design is not proportioned.	All design elements included are balanced and equally proportioned.

Record scores in the column spaces below.



Use of Graphic Design Principles	Design principles (alignment, consistency, contrast, unity, white space) are not incorporated into the graphic, and/or they are considered as an afterthought.	Graphic is missing two (2) or fewer design principles (alignment, consistency, contrast, unity, white space), but the overall layout is aesthetically pleasing.	Graphic is aesthetically pleasing and all design principles are incorporated into the design and layout.	
Graphic Elements	Design uses more than the number of colors specified, gradients and/or photographs. Design colors are not separated. Design does not utilize metal color of the pin in the design.	Design incorporates no more than the maximum number of colors specified. Colors may not be separated by a distinct border. The design may include gradients and/or photographs.	Design incorporates no more than the maximum number of colors specified. Colors are separated by a distinct border. The design does not use gradients. The design does not incorporate any photographs. Design incorporates the metal color of the pin in the design.	
SUBTOTAL				

Proof of permission to use copyrighted image(s) must be included. Clip art must be documented. Failure to provide this information will result in DISQUALIFICATION. No permission is needed for the use of the TSA logo by affiliated chapters.

Rules violations (a deduction of 20% of the total possible points) must be initiated by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____	
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(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	TOTAL SCORE
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Comments:
I certify these results to be true and accurate to the best of my knowledge. Signature: _____
Printed name: _____



Rat Trap Drag Race

OPEN TO HIGH SCHOOL STUDENTS

I. PURPOSE

To allow students to demonstrate their ability to design and construct a vehicle powered only by a standard rat trap spring, to travel a specified distance as fast as possible.

II. ELIGIBILITY FOR ENTRY

This event is open to High School TSA Chapters. Entrants are limited to SIX (6) per school.

III. SPECIFIC REGULATIONS

- A. All entries must be designed and constructed before the conference.
- B. Vehicles must be turned into the event coordinator at the beginning of the conference to be displayed. Students may not pick up their vehicles until the end of the conference.
- C. A documentation portfolio must be submitted with the vehicle at project check-in. The portfolio should include:
 - Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - Table of contents
 - LEAP Individual Resume
 - Design drawings for the rat trap vehicle detailing each part with basic dimensions. These sketches are to be completed on 8-1/2" x 11" paper.
- D. Although the rat trap can be altered, a standard rat trap spring may be the only power source for the vehicle.
- E. The rat trap spring must accompany the vehicle the full length of the track.
- F. Vehicle Specifications:
 - The vehicle may be no longer than 16" at any time during the race.
 - The vehicle may be no wider than 10" at any time during the race.
- E. The track will be 15' long.
- G. The vehicle must be able to travel on either hotel-grade carpet or on smooth-surface dance floor.
- H. Only a standard rat trap may be used.
- I. No kits are allowed; the participant must create the vehicle.



Rat Trap Drag Race

IV. PROCEDURES

- A. Participants will turn in their vehicle to the display area at the beginning of the conference.
- B. Participants must launch their own vehicles
- C. Each vehicle will be launch once and timed. The top 16 vehicles will go to the next round.
- D. The subsequent rounds are single-elimination, head-to-head races with the winner advancing through the bracket.
- E. Vehicles will be returned to the display area at the end of the competition.
- F. Go or No-Go Compliance - A vehicle that receives a “No” answer to any of the requirements below will not advance to the performance stage of the event.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)
 - Does the vehicle meet all the stated specifications? (Yes/No)

V. EVALUATION

The rubric on the following page will be used in the evaluation of this event. In the case of a tie, ranking will be determined by the most innovative design. The Event Coordinator will make this decision. In the case of a tie, ranking will be determined by the most innovative design. The Event Coordinator will make this decision.



Participant/Team ID# _____

RAT TRAP DRAG RACE			
2016 OFFICIAL RATING FORM		HIGH SCHOOL	
Go/No Go Specifications			
<p>Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.</p>			
<input type="checkbox"/> Completed LEAP Resume is present			
<input type="checkbox"/> ENTRY NOT EVALUATED			
Specifications			
<p>Trials: Record information about the time trail and placement on initial bracket</p>			
<p>TIME: _____ PLACEMENT ON INITIAL BRACKET: _____</p>			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Drawing	Drawing is not neat, is not on 8.5" x 11" paper, is not accurate, or is missing. It is not to scale. Measurements are not included.	Drawing is neatly prepared on 8.5" x 11" paper and accurately reflects the design of the vehicle, but is not to scale. Measurements are included.	Drawing is neatly prepared on 8.5" x 11" paper and accurately reflects the design of the vehicle. It is to scale. Measurements are included.
Design Specs - Overall	Vehicle does not meet the design specs for width and length and is out of spec for the duration of the race.	Vehicle does not meet one of the specs for width or length. It remains in spec during the race.	The vehicle meets design specs for width and length. It remains in spec during the race.
Design Specs - Rat Trap	The vehicle is not powered only by a single, standard rat trap spring.	N/A	The vehicle is powered only by a single standard rat trap spring.
Design Specs - Appearance	Vehicle has three needs for improvement: glue usage, tight fitting pieces, and cuts are clean. Vehicle is not decorated or themed.	Vehicle is neatly done, but there is one need for improvement: glue usage, tight fitting pieces, and cuts are clean. Vehicle is painted or decorated. Theme is not clear. Theme/decoration may occasionally interfere with operation of vehicle.	The vehicle is neatly constructed, using a proper amount of glue, tight fitting pieces, and cuts are clean. Vehicle is decorated/themed. Theme/decoration does not interfere with the operation of the vehicle.
<p>Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____</p>			

Record scores in the column spaces below.



Race Final Placement

- | | | |
|---|---|--|
| <input type="checkbox"/> 1st Place: 50 points | <input type="checkbox"/> 4th Place: 35 points | <input type="checkbox"/> 9th-12th Place: 20 points |
| <input type="checkbox"/> 2nd Place: 45 points | <input type="checkbox"/> 5th-6th Place: 30 points | <input type="checkbox"/> 13-16th Place: 10 points |
| <input type="checkbox"/> 3rd Place: 40 points | <input type="checkbox"/> 7th-8th Place: 35 points | <input type="checkbox"/> 17th Place or beyond/DNF: 0 pts |

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)

TOTAL SCORE

Comments:

I certify these results to be true and accurate to the best of my knowledge.

Signature:

Printed name:



Robotic Design

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

I. PURPOSE

Participants will design, build and test a remote controlled robot to carry out a specific challenge. The annual design brief/challenge as well as course specifications and construction materials are located on the Colorado TSA website at: (<http://cotsa.cccs.edu/colorado-tsa-state-conference/>)

II. ELIGIBILITY FOR ENTRY

This event is open to Middle and High School Chapters. Entrants are limited to two (2) teams of two-four (2-4) members per chapter.

III. SPECIFIC REGULATIONS

- A. The robot must be designed and constructed prior to the conference.
- B. Robots must be turned into the event coordinator at the beginning of the conference to be displayed. Students may not pick up their robots until the end of the conference.
- C. Robots are to be constructed to achieve the objectives of the annual design challenge. For 2018, the challenge is a Collapsed Building. The design brief/challenge, as well as the specifications and materials list for the course are located on the Colorado TSA website on the State Conference page (<http://cotsa.cccs.edu/colorado-tsa-state-conference/>)
- D. Robots may be constructed using recycled, salvaged and commercial parts. There is no specific platform or vendor required. Any robot control system can be used. Commercial kits can be used, combined, adapted and re-engineered for the Design Challenge. Examples include, but are not limited to: VEX, LEGO, TETRIX, Fisher/Technic, Lynxmotion, HiTech and/or Arduino.
- E. The robot must start and stop in a space 12" x 12" x 12", but can expand as allowable/necessary.
- F. The robot can be controlled by one or two remote control devices. One or two operators may control the robot during the competition.
- G. The robot, batteries, and controllers are to be checked in at the time and place specified in the conference program. Teams will retrieve their robots when it is time for competition.



Robotic Design

H. The Engineering Design portfolio must be submitted electronically as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at <http://goo.gl/hwsZvC> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID# when submitting their entry. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition. The portfolio should include:

- Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
- Table of Contents; one (1) page
- LEAP Resume (HS)/LEAP Response (MS)
- Description of the Design – 500 words or less explaining the inspiration for the design, materials, batteries, and remote control system. A maximum of 10 bonus points can be awarded for use of sensors and/or programming variables used to assist the operator(s) in controlling the robot. Behaviors altered by these methods must be described in the Description of the Design; two (2) pages
- Photographs of the process of designing, construction and demonstration of the robot prior to competition; four (4) pages maximum
- Drawings – Initial design/brainstorming sketches as well as detail drawings, complete with dimensions and parts clearly labeled; pages as necessary.
- Plan of Work Log (provided); pages as necessary
- Resources/References

IV. PROCEDURE

- A. Only registered team members are permitted to check in, prepare and demonstrate the entry.
- B. When the demonstration begins, the testing area is accessible only to judges and the team currently competing. All other contestants must be outside the perimeter of the testing area.
- D. Each team is given a maximum of three (3) minutes of preparation time to install batteries and perform a system check, NOT for practice or modifications. No practice runs on the course will be permitted.
- E. Each team is allowed three (3) minutes to demonstrate the robot. The clock starts at the judge's signal.
- F. Each team is given one (1) opportunity to demonstrate the robot. Time will be recorded to be used as a tiebreaker only. Teams whose robot fails to begin at the signal may be given a second chance to start again at the discretion of the event coordinator.



Robotic Design

- G. After the robot achieves the objective as detailed in the design brief, it must return to the entry point for egress.
- H. The time stops when the robot has returned and parked in the staging area.
- I. The robot may not navigate over any of the PVC pipe that defines the course.

VI. EVALUATION

The following rubric will be used. In the event of a tie, ranking will be determined by the most innovative design. The Event Coordinator will make this determination.



TECHNOLOGY STUDENT ASSOCIATION PLAN OF WORK				
Date	Task	Time involved	Team member responsible	Comments
1				
2				
3				
4				
5				
6				
Advisor signature _____				



Participant/Team ID# _____

ROBOTIC DESIGN			
2017-2018 OFFICIAL RATING FORM		MIDDLE SCHOOL & HIGH SCHOOL	
Specifications			
Go/No-Go: Before judging the entry, please ensure that these items are present and place a			
<input type="checkbox"/>	LEAP documentation is present in the documentation portfolio.		
<input type="checkbox"/>	Portfolio includes all the required elements.		
<input type="checkbox"/>	ENTRY NOT EVALUATED		
Production Documentation			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Portfolio components	Portfolio is unorganized and/or is missing three or more components.	Portfolio is missing one or two components, and/or it is loosely organized, and/or it lacks sufficient content.	All components are included in the portfolio; content and organization are excellent.
Description of design	The description of the use of the design process in the design and construction of the robot is incomplete. A list of tools and materials is missing or is incomplete. The use of sensors or programming variables used to assist the operator in controlling the robot are not present.	The description of the use of the design process in the desing and construction of the robot is complete. A list of tools and materials used is provided. The use of sensors or programming variables used to assist the operator in controlling the robot are included.	The description of the use of the design process in the desing and construction of the robot is highly detailed, and includes an itemized list of tools, materials and processes used for fabrication; battery specifications, and a detailed description of the control system. The use of sensors or programming variables used to assist the operator in controlling the robot are presented in detail.
Bonus Points	Bonus points are awarded for the use of sensors and/or programming variables used to assist the operator(s) in controlling the robot. Behaviors altered by these methods must be described in the Description of Design. (Max of 10 points)		
Photographs	Photos are missing or do not show all three phases of designing, construction and testing.	Photos of the designing, construction and testing are included.	Detailed photographs showing the designing, construction and demonstration are included.

Record scores in the column spaces below.



Drawings	Initial design sketches may or may not be present. The detail drawings are not complete with many of the required elements missing. Dimensions are missing or are not to scale. Parts are not labeled.	Initial design sketches are present. The detail drawings are present but may be missing several required key elements. Most dimensions are provided and may be to scale. Parts are labeled.	Initial design sketches are present and show a progression of the design. The detail drawings are complete and correct with all required elements included. Parts are clearly labeled.
Plan of work log	The Plan of Work log lacks major elements of the plan documentation. Dimensions are indicated and are to scale.	The Plan of Work log is somewhat complete, and generally reflects the time and work necessary for the project.	The Plan of Work log completely and accurately reflects the time and work necessary for the project.
Resources/References	There is little or no effort to provide resources and references.	Resources and references included are generally presented appropriately.	There is clear evidence of the appropriate use of applicable resources and references. Reference list is formatted correctly.

SUBTOTAL

Robot Construction			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Robot	Robot does not meet size requirements.	N/A	Robot meets all size requirements.
Construction	The robot is poorly constructed; parts are loose/poorly fitted.	The robot is constructed well. Parts are tight fitting.	The robot is cleanly constructed with many intricate parts that are well fitted. There is great craftsmanship
Use of Materials	The robot does not make effective use of materials. There are more than two obvious areas for improvement.	The robot makes good use of the materials, though there is some room for improvement.	The robot makes effective and efficient use of the materials. There is obviously great thought put into material choice.
Creativity and artisanship	Few unique and innovative concepts are incorporated in the overall design.	Some unique, innovative, and creative concepts are incorporated in the overall design.	Unique, creative and innovative approaches have met the challenges of, and have been incorporated into, the design.
SUBTOTAL			



Robot Performance	
Zone 1	Robot meets all size requirements - 2 points Robot does not meet all size requirements - 0 points
Zone 2	Robot parks head-on in the parking space = 1 point Robot backs into the parking space = 2 points Robot parallel parks in the parking space = 6 points
Zone 3	Robot successfully navigates packed rubble = 3 points
Zone 4	Robot successfully flips columns = 1 point each (3 points max.)
Zone 5	Robot successfully moves loose debris into the safe zone = 1 point per piece (6 points max)
Zone 6	Robot successfully turns off "gas leak." = 9 points
Egress	Robot successfully returns to the entry/egress point = 5 points
SUBTOTAL	

Robot Construction			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Quality of Construction/Safety	Construction is of poor quality & appearance, with little or no attention to neatness. Robot is unsafe for operation.	Construction is somewhat neat and has appropriate quality and appearance. Robot is safe for operation.	Construction is of excellent quality and exemplary appearance. Robot is safe for operation.
Use of materials	The choice of materials is ineffective and inadequate for the type and scale needed.	There is effective choice of materials and some attention to scale.	There is effective and excellent use of materials and accurate choice of scale.
SUBTOTAL			

Point Deductions (as indicated, 36 points maximum):
 Zone 2: Robot out of parking area (-1 for each part)
 Vertical columns knocked over: (-3 points for each column)

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TIME TO COMPLETE THE COURSE (to be used only as a tiebreaker): _____

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.
 Indicate the rule violated: _____

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(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	TOTAL SCORE
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Comments:

I certify these results to be true and accurate to the best of my knowledge.
 Signature: _____
 Printed name: _____



Rubber Band Powered Cars

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

I. PURPOSE

To allow students to demonstrate their ability to design and construct a vehicle powered only by a rubber band and a bladed-propeller.

II. ELIGIBILITY FOR ENTRY

This event is open to Middle School and High School Chapters. Entrants are limited to **THREE (3)** per school.

III. SPECIFIC REGULATIONS

- A. All entries must be designed and constructed before the conference.
- B. Cars must be turned into the event coordinator at the beginning of the conference to be displayed. Students may not pick up their cars until the end of the conference.
- C. Student must make car from scratch in the year it is raced. (No kits)
- D. Racers may use any commercial wheels, axles and bladed propellers (as shown in the illustration at the right.)
- E. A documentation portfolio must be submitted with the vehicle at project check-in. The portfolio should include:
 - Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - Table of contents
 - LEAP - High School Individual Resume or Middle School LEAP Response
 - Design drawings for the rat trap vehicle detailing each part with basic dimensions. These sketches are to be completed on 8-1/2" x 11" paper.





Rubber Band Powered Cars

F. Vehicle Specifications:

- The vehicle should resemble a commercially produced automobile (a sedan, pickup truck, or sports car for example) and not just be of simple stick & propeller configuration.
- The vehicle body must be completely enclosed - not just have a profile of a vehicle shape.
- The car may not exceed 24 inches in length.
- The car may not exceed 8 inches in width.
- The car may not exceed 10 inches in height.
- The car will be powered by a single 7" x 1/8" rubber band (also known as a file band) attached to the bladed propeller (as illustrated above).
- The car must be designed so that an eyelet is placed at the front of the car, 1/4" from the floor.
- The car must be powered solely by the rubber band and bladed propeller; the rubber band should NOT be used in a manner other than to provide power to the propeller.

F. The track will be 20' long x 15" wide. The surface of the track will be hardwood flooring (hotel dance floor).

G. The cars will race against the stopwatch. Each car will race three times, and an average speed will be calculated.

IV. PROCEDURES

A. Participants will turn in their car to the display area at the beginning of the conference.

B. Participants must launch their own cars.

C. Go or No-Go Compliance - A vehicle that receives a "No" answer to any of the requirements below will not advance to the performance stage of the event.

- Is LEAP documentation present in the documentation portfolio? (Yes/No)
- Does the vehicle meet all the stated specifications? (Yes/No)

V. EVALUATION

The vehicle will be evaluated using the following rubric. In the event of a tie, ranking will be determined by the most economically-produced model. The Event Coordinator will make this determination.



Participant/Team ID# _____

RUBBERBAND POWERED CARS			
2017-2018 OFFICIAL RATING FORM		MIDDLE AND HIGH SCHOOL	
Go/No Go Specifications			
<p>Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.</p>			
<input type="checkbox"/> Completed LEAP Resume (HS)/LEAP Response (MS) is present			
<input type="checkbox"/> ENTRY NOT EVALUATED			
Specifications			
<p>Time Trials: Calculated by: Distance (in inches) traveled / Time (in seconds)</p> <p>Speed Trial 1: _____" / _____ sec. = _____/second</p> <p>Speed Trial 2: _____" / _____ sec. = _____/second</p> <p>Speed Trial 3: _____" / _____ sec. = _____/second</p> <p style="text-align: center;">TOTAL = _____/3 = (_____/sec) x 10 = PUT TOTAL HERE >></p>			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Drawing	Drawing is not neat, is not on 8.5" x 11" paper, is not accurate, or is missing. It is not to scale. Measurements are not included.	Drawing is neatly prepared on 8.5" x 11" paper and accurately reflects the design of the vehicle, but is not to scale. Measurements are included.	Drawing is neatly prepared on 8.5" x 11" paper and accurately reflects the design of the vehicle. It is to scale. Measurements are included.
Design Specs - Overall	Vehicle does not meet the design specs for length, width or height and does not have an eyelet screw at the front of the car.	Vehicle does not meet one of the specs for length, width or height, or it may not have an eyelet screw correctly placed at the front of the car.	The vehicle meets design specs for length, width and length. It has an eye screw placed at the front of the car 1/4" from the floor.
Design Specs - Rubberband	The vehicle is powered by a source other than the specified single, 7" x 1/8" rubber band.	N/A	The vehicle is powered solely by the specified 7" x 1/8" rubber band.
Design Specs - Appearance	Vehicle has two or more needs for improvement: glue usage, tight fitting pieces, and cuts are clean. Vehicle is not decorated or themed.	Vehicle is neatly done, but there is one need for improvement: glue usage, tight fitting pieces, and cuts are clean. Vehicle is painted or decorated. Theme may not be clear. Theme/decoration may occasionally interfere with operation of vehicle.	The vehicle is neatly constructed, using a proper amount of glue, tight fitting pieces, and cuts are clean. Vehicle is decorated/themed. Theme/decoration does not interfere with the operation of the vehicle.

Record scores in the column spaces below.



Rules violations (a deduction of 20% of the total possible points) must be initiated by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.
Indicate the rule violated: _____

Race Final Placement

- | | | |
|---|---|--|
| <input type="checkbox"/> 1st Place: 50 points | <input type="checkbox"/> 4th Place: 35 points | <input type="checkbox"/> 9th-12th Place: 20 points |
| <input type="checkbox"/> 2nd Place: 45 points | <input type="checkbox"/> 5th-6th Place: 30 points | <input type="checkbox"/> 13-16th Place: 10 points |
| <input type="checkbox"/> 3rd Place: 40 points | <input type="checkbox"/> 7th-8th Place: 35 points | <input type="checkbox"/> 17th Place and beyond/DNF: 0 points |

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)

TOTAL SCORE

Comments:

..... I certify these results to be true and accurate to the best of my knowledge.

Signature:

Printed name:



SeaPerch

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

I. PURPOSE

The challenge is a test of the accuracy, robustness and design of a remotely operated underwater vehicle. This contest at the Colorado TSA State Conference serves as a qualifying event for the National SeaPerch Challenge.

The vehicles created for this event must navigate an obstacle course as well as complete a challenge course. Specific information about this year's challenges are available on the SeaPerch website: www.seaperch.org.

II. ELIGIBILITY FOR ENTRY

At the TSA state competition, this event is open to Middle and High School TSA Chapters. Entries are limited at state to one (1) team of 2-6 students per chapter per competition class (e.g., Stock and Open classes), for a maximum total of two (2) teams per chapter.

III. SPECIFIC REGULATIONS

A. Definition of Classes: The competition will comprise three classes: Middle School Stock Class, High School Stock Class and Open Class.

- **Middle School Stock Class** - Middle school is defined as less than and including 8th grade. All students participating in this class must be in 8th grade or lower. Teams are limited to a maximum of \$20 above the cost of the SeaPerch kit or materials (see Regulation G) for modifications.
- **High School Stock Class** - High school is defined as 9th through 12th grades. Teams are limited to a maximum of \$20 above the cost of the SeaPerch kit or materials (see Regulation G) for modifications.
- **Open Class** - Open Class is not separated by grade.
 - ▶ Teams in the Open Class have no budget limit in the construction of the ROV as long as the ROV complies with all other regulations. Research and Development costs and tools do not count in the costs, only what teams bring to the competition lane.
 - ▶ If the ROV uses more than three (3) thrusters, it is considered Open Class. A thruster is defined as a means of propulsion for the SeaPerch, normally, but not limited to, a motor and propeller assembly.
 - ▶ If the ROV thruster controls are not simple switches, it is considered Open Class (e.g., ROV uses power conditioning or pulse-width modulation [PWM] controls).

B. Each SeaPerch ROV must be presented for compliance check during check-in and approved prior to the team competing in pool events.



SeaPerch

- C. Only two team members are allowed on the pool deck in the competition area during an event.
- D. All team members must wear shoes with rubber soles on the pool deck.
- E. Each team must supply their own 12V power system. The system must be designed to work with the alligator clips in the SeaPerch kit.
- The vehicle MAY NOT be dragged via the tether.
 - The vehicle may be reset by the teams during the competition
 - The ROV may be worked on by the teams during the competition
- F. Teams are encouraged to think outside the box and change the shape and configuration of their SeaPerch ROV. For information on the basic SeaPerch underwater ROV, please visit the SeaPerch website at www.seaperch.org. The website contains training videos under the “Getting Started” tab to give students a better idea of the SeaPerch project.
- G. Stock Class (High School and Middle School)
- Teams may utilize materials (quantity and components) equivalent to one SeaPerch kit. Kits may be purchased online, but teams may choose to build the ROV from scratch. Teams not utilizing the official kits are restricted to the following equivalent supplies:
 - ▶ 10 - White PVC 1/2” - 90 Degree Elbow
 - ▶ 6 - White PVC 1/2” x 12” - Straight Pipe
 - ▶ 4 - White PVC 1/2” - Tee
 - ▶ 1 - Mesh - 12” x 8” - Black Polyethylene
 - ▶ 2 - Pool Noodle - 5” Piece
 - ▶ 15 - Cable/Zip Ties - 6” Black
 - ▶ 6 - Tie Wraps - Motor Mount - 11-1/4” - Blue
 - ▶ 3 - 12 VDC Motor, 0.7 A - Shaft Diameter “0.091”
 - ▶ 3 - Film Canister - 35 mm or Plastic Vial - 50 ml
 - ▶ 3 - Propellers - Plastic 1/8” Shaft Size
 - ▶ 3 - Propeller Shaft Threaded Coupler
 - ▶ 3 - Threaded Insert Tee Nut
 - ▶ 3 - Nylon-Insert Hex Locknut 4-40 - Stainless Steel
 - ▶ 1 - 50 ft. 350 Mhz Cat 5e Stranded Cable W/RJ-45
 - ▶ 1 - Velcro Cable Tie
 - ▶ 1 - SeaSwitch Control Box Kit
 - ▶ 1 - 18 Awg Speaker Wire - 6’
 - ▶ 1 - Alligator Clips (Set of 2)
 - ▶ 1 - Black Alligator Clip Insulator
 - ▶ 1 - Red Alligator Clip Insulator
 - ▶ 1 - Solder - 60/40 Rosin Core
 - ▶ 1 - Butyl Rubber Tape - 1.5” x 3” (Monkey Dung)
 - ▶ 1 - Alcohol Wipe
 - ▶ 1 - Electrical Tape - Black - Roll
 - ▶ 1 - Wax Bowl Ring
 - ▶ 1 - Sealed Lead Acid Battery - 12 V, 7 Ah,
 - ▶ 1 - Sealed Lead Acid Battery Charger - 12 V, 500 mA
 - ▶ 1 - Battery Charger Cable - SLA Cord
 - ▶ 1 - Pair, Safety Glasses
 - ▶ 1 - SeaPerch Tote Bag
 - ▶ 1 - SeaPerch - 8” Ruler
 - ▶ 1 - SeaPerch Careers Brochure
 - ▶ 2 - Disposable Latex Gloves
 - ▶ 1 - Sharpie Marker - Black or Red
 - ▶ 1 - SeaPerch Pen
 - ▶ 1 - SeaPerch Tote Bag



SeaPerch

- Teams in the Stock classes can use up to a maximum of \$20.00 in addition to the SeaPerch Kit or materials listed in Regulation G for modifications.
 - ▶ The actual value of the modifications must be \$20 or less.
 - ▶ Donated material will be assessed at what the cost would be to procure the material.
 - ▶ The \$20 limit is for cost of the materials utilized on the final competition vehicle.
 - ▶ Reasonable spare parts (one set of thrusters (3) and one controller) are not included in this budget.
 - ▶ Proof of budget compliance should be made available to the judges upon request.
- 3D printed parts will be costed out at \$0.05 per gram.
- All motors must be waterproofed.
- Hooks and attachments MAY NOT be added/removed between competition rounds.
- Additional NON-stock motors may be utilized for actuation or other non-propulsion uses.
- Teams may only utilize stock SeaPerch motors for propulsion (Jameco Electronics P/N 232022).
- Teams may only utilize three (3) thrusters.
- A thruster is defined as a means of propulsion for the SeaPerch, normally but not limited to a motor and propeller assembly.
- Teams will design for and utilize a 12-volt power source.
- ROV thruster controls shall use simple switches only, no power conditioning or pulse-width modulation (PWM) controls are allowed in Stock Class. Use of a fixed or variable resistor to reduce voltage is acceptable.
- ROVs shall fit through an 18" hoop.



SeaPerch

H. Open Class

- Vehicles should consist of the parts and components utilized within the SeaPerch kit or those listed in the materials list to the maximum extent possible and shall be subject to the following:
 - ▶ Teams have no budget limit. (Budgets should be tracked for presentation to judges upon request)
 - ▶ Hooks and attachments **MAY NOT** be added/removed between competition rounds.
 - ▶ Teams may only utilize stock SeaPerch motors for propulsion. (Jameco Electronics P/N 232022)
 - ▶ Non-stock motors may be utilized for actuation or other non-propulsion uses.
 - ▶ Teams will design for and utilize a 12-volt power source. A 10-Amp Max fuse shall be used for safety.
 - ▶ ROVs shall fit through an 18” hoop.

IV. Procedure

- A. The vehicle will complete two challenges: The Obstacle Course and the Challenge Course.
- B. The Obstacle Course - An underwater remotely operated vehicle (ROV) must be able to maneuver successfully under its own power. If a vehicle cannot maneuver to the appropriate location to perform its task, the vehicle is of no use. Consideration of optimal maneuverability as well as control and speed should be given when constructing your SeaPerch (thruster placement and orientation, tether attachment, buoyancy and ballast, etc) and control box.

The submerged obstacle course involves large rings (18” minimum diameter), oriented in any direction, through which the vehicles must travel. Teams must navigate their ROV through the obstacle course, surface, then re-submerge and return through the course to the end.

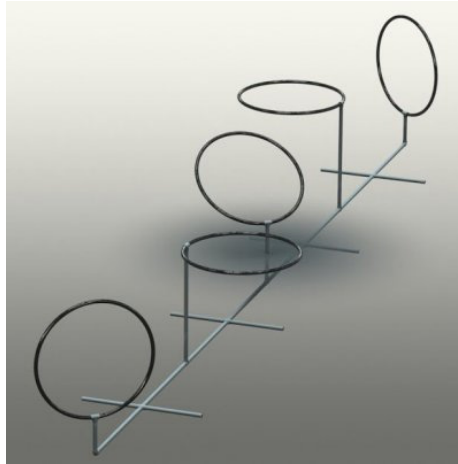
Scores for this round will be based on the fastest time for successfully navigating the obstacle course.

There are five (5) -18” diameter hoops in the obstacle course. Final configuration of hoop orientation and heights will not be revealed until the State/National competition.



SeaPerch

The course used in the competition is illustrated below:



C. The Challenge Course - For specific information regarding the challenge course, please consult the National SeaPerch website at www.seaperch.org/challenge_rules#design. However, all competitors should become familiar with the following items/devices.

- The Rings: There are rings on each of the courses. Each ring is made of 18" of $\frac{3}{4}$ " Polypropylene line, the line is held together with a 1.5" length of $\frac{3}{4}$ " copper pipe crimped to hold the assembly together. This simple ring configuration is only 8 grams when placed in the water.
- The Cubes: There are Cubes on each of the courses for nationals. Each cube is made of 8 of 3-way elbows. 12 x 1.5" pieces of PVC pipe hold the cubes together. There are 4 x 1-1/2" pieces of 5/8" backerfoam in the top four pieces of PVC pipe.



D. The Engineering Notebook - Using an Engineering Notebook provides a good learning experience allows students to demonstrate their understanding of engineering principles and design concepts.

The Engineering Notebook is used to measure the team's ability to document the engineering design process used to design and modify their SeaPerch to meet the pool challenges. The Engineering Notebook is not intended to document the construction of the standard SeaPerch ROV.

Please note: The engineering notebook for the TSA State Competition must be submitted as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID# when submitting their entry. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.



SeaPerch

For the COTSA State Conference, the Engineering Notebook PDF files must use the following naming convention: *Division_TeamID#.pdf* For example: *MS_2001-4.pdf*. (Divisions: OC = Open Class, HS = High School, MS = Middle School).

For the National SeaPerch Competition, the Engineering Notebook must be submitted using a different naming convention. Please consult the national SeaPerch website (www.seaperch.org/challenge_rules#design) for more information on how to name and submit the notebook for the national competition.

Teams should use the notebook throughout the SeaPerch project to document the engineering design process and specific steps taken in designing and modifying the SeaPerch ROV to complete the SeaPerch challenges.

The notebook:

- The notebook must be no more than 6MB in size.
- The notebook must be formatted as 8-1/2" x 11" pages.
- The notebook must be no more than 24 pages including the title, information, and table of content pages.
- The PDF file may not contain videos, animated GIFs, or other dynamic content.
- The notebook should contain the following items in this order:
 - ▶ Cover/Title Page containing:
 - ▶ Project Title
 - ▶ Team Name (for SeaPerch National Competition only) or Team ID# (for COTSA State Competition Only)
 - ▶ Photo of final ROV
 - ▶ Date notebook was completed
 - ▶ Team Information Page (**For SeaPerch National Competition ONLY**. For COTSA State Competition, this page should NOT be included), containing:
 - ▶ School or club name
 - ▶ School district (if applicable)
 - ▶ City and State
 - ▶ Name and email address of teachers, coaches, mentors, and advisors (or team leader if the POC is a student)
 - ▶ Team member names, grade levels, and role in the project. Use first names only for students. If two or more students have the same first name, use an identifying letter following the first name.
 - ▶ Table of Contents Page, containing page titles/descriptions and page numbers
 - ▶ Reference citations of research such as books, articles, and website addresses.



SeaPerch

- ▶ Engineering Design Process
 - ▶ Provide details of each step taken in the engineering design process using the SeaPerch Challenge pool events as the project problem/goal.
 - ▶ Provide sketches, drawings, charts, and other graphics and written documentation describing solution and design concepts, design iterations, tests performed, and test results.
 - ▶ Include engineering and scientific terms and concepts to demonstrate that the team understands the challenges of constructing and operating an underwater ROV.
 - ▶ All pages should be numbered and listed in the Table of Contents.

V. Evaluation

For Individual Events, each event will be scored in accordance with the rubrics published on the national SeaPerch website. Teams will then be ranked, by their score, both within their class and overall. For a combined score, each team's rank in the individual events will be added together and then ranked in order to determine the overall Class winner and overall Stock winner. A simplified scoring sheet for teams to use in preparing for the competition may be found here: http://www.seaperch.org/action/document/download?document_id=557

Ties will only be broken where it is required to determine trophy places. (i.e., ties will not be broken when ties do not affect the top three results in any event or class overall). Obstacle Course ties to the 100th of a second will be broken by the faster time in the secondary run. Challenge ties to the 100th of a second to the same point total will be broken by rerunning a portion of the course. The winner will have 1/100th of a second removed from their time, thus breaking the tie. Class ties will be broken based upon the best performance in the following priority:

- 1) Challenge
- 2) Engineering Notebook
- 3) Obstacle



Silent Movie

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

I. PURPOSE

Participants use video production skills to create a “silent” movie and then create a musical score to accompany the film. The use of silent films gets students to think about music and its application to other forms of art and technology. Scoring for silent movies improves students’ intellectual ability and their ability to think abstractly.

II. ELIGIBILITY FOR ENTRY

This event is open to Middle School AND High School Chapters. Entries are limited to one (1) team of 2-6 students per chapter.

III. SPECIFIC REGULATIONS

- A. Entries must be started and completed prior to the conference.
- B. The video must be at three (3) to five (5) minutes in length.
- C. Participants must create, script, storyboard and produce the video footage for a movie in the style of vintage silent movies. Participants must then produce an original musical score to accompany the movie. No other sound should accompany the movie. If any other sound/ sound effect (e.g., clatter of a movie projector to create ambiance) accompanies the movie other than the musical score, the entry will be disqualified.
- D. Participants may NOT use stock footage. All video footage must be the original work of the participants.
- E. Participants may NOT use Royalty Free music for their final solution. All the music must be the original composition/creation of the participants.
- F. The final musical score may be produced digitally through a range of available software available to the students (e.g., Garageband), or may be performed by a musician/musical group and recorded for later addition to the film. If the performance is to be recorded:
 - The musical score should be the original work of the participants. No use of royalty free or copyrighted music may be used.
 - Participants must document who performed the music and must include a release form from the performers in the documentation.
- G. Participants may solicit other chapter members to assist in collecting footage for their silent movie and or musical score, however, representatives from the team are limited to six (6).



Silent Movie

- H. Due to the complexity of this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube's public spaces such as search results, a person's own channel, or the Browse page. Only people with whom participants share the link will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. February 1, 2017. Contestants will need to enter their STATE CONFERENCE ID# when submitting an entry. Entries not submitted electronically or are not received by the deadline will NOT be considered for competition.
- I. When submitting a design, contestants should prepare a single, multi-page documentation portfolio in PDF document (8.5" x 11") that includes:
- Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - Table of contents; pages as needed
 - LEAP documentation (High School Team Resume or Middle School LEAP Response)
 - A copy of the script; pages as needed
 - A copy of the storyboard; pages as needed
 - Four-column cue sheet(s) listing the scenes, the action, music suggestions that go with each action, and the length in the film into which the music should fit; provided - copy sheets as necessary.
 - Students may use whatever musical production software is available to them to create the musical score; pages as needed
 - A written copy of the score and documentation of the software used to create the musical piece; pages as needed
 - The original release forms signed by individuals appearing in or performing for the production; pages as needed



Silent Movie

IV. PROCEDURE

- A. Entries are reviewed by evaluators. Neither students nor advisors are present at this time.
- B. Go or No-Go Compliance - A video that receives a “No” answer to any of the requirements below will not advance to the performance stage of the event.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)
 - Does the video meet all the stated specifications? (Yes/No)

V. EVALUATION

Evaluation is based on points earned for the portfolio elements, the quality of the video production, and the overall effectiveness of the musical score. The film portion will be judged on story concept, artistic and/or social value, camera technique, transition, video pace, as well as technical attributes, creativity and organization.



**COLORADO TSA
SILENT MOVIE
FOUR-COLUMN CUE SHEET**

SCENE	ACTION	MUSIC	LENGTH



Silent Movie

TSA SILENT MOVIE

PHOTO / FILM/ VIDEO CONSENT AND RELEASE

I hereby give permission for images of my child or myself (as applicable), captured during Technology Student Association (TSA) activities through video/film, photo or digital camera, to be used solely for the purposes of TSA competitions, promotional materials and publications, and I waive any rights of compensation or ownership thereto.

Name of minor in images (please print)

Name of minor's parent/guardian (please print)

Name of adult in images (please print)

Parent/guardian or adult's signature (as applicable)

Date



Silent Movie

TSA SILENT MOVIE

PERFORMANCE CONSENT AND RELEASE

I /We hereby give permission for the use of my/our performance of an original musical piece created by:

for the Technology Student Association (TSA) Silent Movie competitive event. I/We understand that the performance used in this competitive event may be used for purposes of this competitive event and also may be used for future promotion of this event as well as TSA in general. I/We hereby waive any and all rights of compensation or ownership thereto.

Name(s) of performer(s)

Signature of performer

Signature of performer

Signature of performer

Signature of performer

Date



Cue Sheet	The cue sheet is sloppy, seems to have been created after the creation of the finished piece and/or it is missing critical elements or does not correlate with the final product.	The cue sheet is included and lists the scenes, action, and music suggestions. May include location and how music links to how the music should fit.	The cue sheet is in proper format, listing the scenes, the action, music suggestions that go with each action, and the location and length in the film into which the music should fit.	
Musical Score	Musical score is incomplete or missing; score does not follow musical conventions.	The musical score is included and represents the music for the movie but may contain errors in notation or musical convention.	The musical score is included and accurately represents the music for the movie. Score follows the convention of written music, including appropriate measure spacing, key and time signature notations, etc.	
Creativity and Uniqueness	The musical idea is overly familiar or is a cliché; no variety or exploration of musical elements (range, timbre, dynamics, tempo, rhythm, and melody) is evident.	The work involves some original aspects or manipulations of musical ideas; it explores and varies at least one or more musical elements.	The piece includes highly original, unusual, or imaginative musical ideas; it explores and varies at least two or more musical elements.	
Artisanship	The piece gives no sense of a completed musical idea; there is no clear beginning, middle, or end section; the form appears random, rather than organized.	One musical element has been used to organize the musical ideas and overall form, which are somewhat coherent.	The piece presents at least one complete musical idea; the piece has a coherent and organized form with a clear beginning, middle, and end; musical elements are used to organize the musical ideas and form.	
Energy and Style	The piece lacks liveliness, vitality, and vigor; there is no flair, elegance, or grace to the piece. The music does not enhance the movie.	The piece generates an initial level of energy that appeals to the listener; the style is somewhat distinctive. The music does not enhance the movie.	The liveliness and forcefulness of the piece excite the listener; the style is truly unique and serves to enhance the story, message and theme of the movie.	
SUBTOTAL				

Time violation (a deduction of five (5) points will be incurred for being shorter than 3 three minutes or exceeding the five (5)-minute time limit for the length of the video). Record the deduction in the space to the right.

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.
Indicate the rule violated: _____

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.) **TOTAL SCORE**

Comments:

I certify these results to be true and accurate to the best of my knowledge.
Signature: _____

Printed name: _____



T-Shirt Design

OPEN TO MIDDLE AND HIGH SCHOOL STUDENTS

OVERVIEW:

Participants in this event develop and submit electronically in PDF format a T-shirt design, which can be adopted as the Colorado state delegation T-shirt to be worn at the National TSA conference.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit their entries as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at <http://goo.gl/hwsZvG> by February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID# when submitting their entry. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

I. PURPOSE

Provide a means for TSA members to demonstrate their ability to communicate design and layout skills.

II. ELIGIBILITY FOR ENTRY

This event is open to Middle School and High School Chapters. Entries are limited to one (1) entry per student.

III. SPECIFIC REGULATIONS

- A. The T-shirt design is an individual event. No recognition will be given for a group effort.
- B. The student should develop a design for the back of the T-shirt as well as an accompanying design for the front left pocket area of the Shirt.
- C. The student should create a design for the back of the shirt (it must fit on a standard 8.5" x 11" piece of paper in portrait orientation).
- D. The student should also create a design for the left chest area of the front of the shirt not to exceed 5" x 5".
- C. The design of the shirt may have a maximum of three (3) colors. This does not include the color of the shirt (for example, if a white shirt is used, white can be incorporated into the design along with three other colors).
- D. The design should reflect the current year's national conference theme which can be found at <http://www.tsaweb.org/Themes-and-Problems>.



T-Shirt Design

- E. The following information **MUST** be included in the design:
- The words “TSA National Conference”
 - Date of the National Conference
 - Location of the National Conference (City & State)
 - The theme for the National Conference
 - Either the Colorado TSA logo, or the official TSA logo
 - The type face(s) may be original in design or may consist of a traditional-type style(s). The required alphanumeric characters may be incorporated as an integral part of the illustration.
- F. Public domain computer clip art may be included in the design. Use of copyrighted or registered artwork in design is prohibited without verified permission from the original artist/publisher,
- G. Students **DO NOT** have to print out the design or prepare a mock up of the shirt. Contestants should submit their entries electronically as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID# when submitting their entry. Entries that are not submitted electronically or are not received by the deadline will **NOT** be considered for competition.
- H. When submitting a design, contestants should prepare a single, multi-page documentation portfolio in PDF format (8.5” x 11”) that includes:
- Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - Table of contents
 - LEAP documentation (High School Individual Resume or Middle School LEAP Response)
 - **Design:** A full-color design for the back of the shirt (no larger than 8.5” x 11” - portrait orientation). This page should also include the contestant’s individual ID number. Nothing else should appear on this page.
 - **Design Part II:** A full-color design for the front of the shirt (no larger than 5” x 5”). This page should also include the contestant’s individual ID number. Nothing else should appear on this page.
 - **Description:** A one (1) page description of the design process (including research efforts, design plans, creation process and self evaluation). This would include an explanation of the designer’s inspiration. This description should also include software programs used, artwork/graphic/ photo sources used in the production of the graphics.



T-Shirt Design

- **References:** All entries must be the original work of the participant. Computer generated type fonts and public domain computer clip-art may be used. All ideas, text or images from sources other than the designer must be cited (copyrighted or not). Cited works should be in MLA format (see the Documentation Style Guide in this book for formatting examples!).
 - **Letters of Permission:** If copyrighted material is used, separate written permission must be included as well. Failure to follow this procedure will result in disqualification. If the artwork is completely original, this must be stated in the description.
- I. All submissions are to be received by 11:59 p.m. on FEBRUARY 1, 2018.
 - J. Copies of previously submitted (winning or non-winning) designs shall not be used.

IV. PROCEDURE

- A. **Registration:** Event participants must register and follow the guidelines for the event in accordance with the procedures established for the conference.
- B. All winning entries will become the property of Colorado TSA. Colorado TSA reserves all rights to use and modify the designs for use on the state delegation t-shirt.
- C. **Go or No-Go Compliance** - A design that receives a “No” answer to any of the requirements below will not be evaluated.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)
 - Does the design meet all the stated specifications? (Yes/No)

V. EVALUATION

The designs will be evaluated using the following rubric. In the event of a tie, ranking will be determined by the Event Coordinator.



Participant/Team ID# _____

T-SHIRT DESIGN			
2016 OFFICIAL RATING FORM		MIDDLE & HIGH SCHOOL	
Go/No Go Specifications			
<p>Before judging an entry, ensure all items below are present; indicate presence with an "X" in the box. If an item is missing, leave the box blank and place an "X" in the box labeled ENTRY NOT EVALUATED; this disqualifies the entry and it is not to be judged.</p>			
<input type="checkbox"/> Completed LEAP Resume (HS) / LEAP Response (MS) is present			
<input type="checkbox"/> ENTRY NOT EVALUATED			
Specifications			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Design Specs: Artwork Part I	T-shirt design is poorly prepared, is not in color, or has more colors than specified. Design is NOT presented in PDF format, or does not show both front/back designs of shirt.	T-shirt design in color. Design consists of no more than three colors (not including the color of the shirt). Design is not presented in PDF format or may show only the front or back design of the T-shirt.	T-shirt design is prepared neatly and in color. Design consists of no more than three colors (not including the color of the shirt). The design is presented in PDF format and shows both front and back designs of T-shirt.
Design Specs: Artwork Part II	<p>Artwork is not clear and all elements are not readable/recognizable. Design may be missing two or more of the following:</p> <ul style="list-style-type: none"> • The words "TSA National Conference" • The Colorado TSA logo or official TSA logo • Dates of the National Conference • Location of the National Conference • The theme of the design reflects some aspect of Colorado and Colorado TSA • The words "Colorado TSA" 	<p>Artwork is clear and all elements are readable/recognizable. Design may be missing one of the following elements:</p> <ul style="list-style-type: none"> • The words "TSA National Conference" • The Colorado TSA logo or official TSA logo • Dates of the National Conference • Location of the National Conference • The theme of the design reflects some aspect of Colorado and Colorado TSA • The words "Colorado TSA" 	<p>Artwork is clear and all elements are distinct and easily readable/recognizable. Design includes:</p> <ul style="list-style-type: none"> • The words "TSA National Conference" • The Colorado TSA logo or official TSA logo • Dates of the National Conference • Location of the National Conference • The words "Colorado TSA"
Design Specs:	The artwork DOES NOT reflect, interpret or in some other way communicate the theme of the national conference. Design also does not include some element that reflect, interprets or in some other way communicates a sense of the specified theme as outlined in the rules.	N/A	The artwork reflects, interprets, or in some other way communicates the theme of the theme of the design reflects some aspect of Colorado and Colorado TSA.
Design Specs: Artwork Part III	Design is messy and/or damaged; it includes three (3) or more of the following: dull/rough edges, hard to read fonts, smudges, smears on the graphic, extraneous markings.	Design has several good points, but some details detract from the overall quality; it includes two (2) or fewer of the following: dull/rough edges, hard to read fonts, smudges, smears on the graphic, extraneous markings.	Graphic is striking, elegant and includes one (1) or none of the following: dull/rough edges, hard to read fonts, smudges, smears on the graphic, extraneous markings.

Record scores in the column spaces below.



Usefulness	Graphic has no correlation to the state TSA affiliate it is intended to relate to; design does not work for the intended purpose.	Design generally works for its intended purpose, but it may be a little too big or too small in size; design correlates to the intended state TSA affiliate.	The design is a perfect size for the intended purpose; there is strong evidence for correlation of the design to the TSA affiliate.	
Dominance	Eyes are drawn away from what should have been focal point by some other component of the graphic.	An attempt is made to use a graphic component that will draw attention to the design's main idea, but the result is confusing.	The design's main components draw eyes to the appropriate location and/or focal point of graphic.	
Balance and Proportion	Design seems unbalanced; too little and/or too many graphic elements are included, and they are out of proportion.	Design is somewhat balanced but some graphic elements are too large and/or too small; the design is not proportioned.	All design elements included are balanced and equally proportioned.	
Use of Graphic Design Principles	Design principles (alignment, consistency, contrast, unity, white space) are not incorporated into the graphic, and/or they are considered as an afterthought.	Graphic is missing two (2) or fewer design principles (alignment, consistency, contrast, unity, white space), but the overall layout is aesthetically pleasing.	Graphic is aesthetically pleasing and all design principles are incorporated into the design and layout.	
Graphic Elements	Design uses more than the number of colors specified, gradients and/or photographs. Design colors are not separated.	Design incorporates no more than the maximum number of colors specified. The design may include gradients and/or photographs.	Design incorporates no more than the maximum number of colors specified. The design does not use gradients. The design does not incorporate any photographs.	
SUBTOTAL				

Proof of permission to use copyrighted image(s) must be included. Clip art must be documented. Failure to provide this information will result in DISQUALIFICATION. No permission is needed for the use of the TSA logo by affiliated chapters.

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right. Indicate the rule violated: _____	
---	--

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	TOTAL SCORE
--	--------------------

Comments:
I certify these results to be true and accurate to the best of my knowledge. Signature: _____
Printed name: _____



Theatrical Set Design

OPEN TO HIGH SCHOOL STUDENTS

I. PURPOSE

Participants demonstrate an understanding of, and aptitude for, architectural design along with the development of plans, construction and modeling techniques, and practices as applied to the theatre industry. Participants develop a set of architectural plans and related materials for an annual theatrical set design challenge and construct a physical, as well as a computer-generated model, to accurately depict their design.

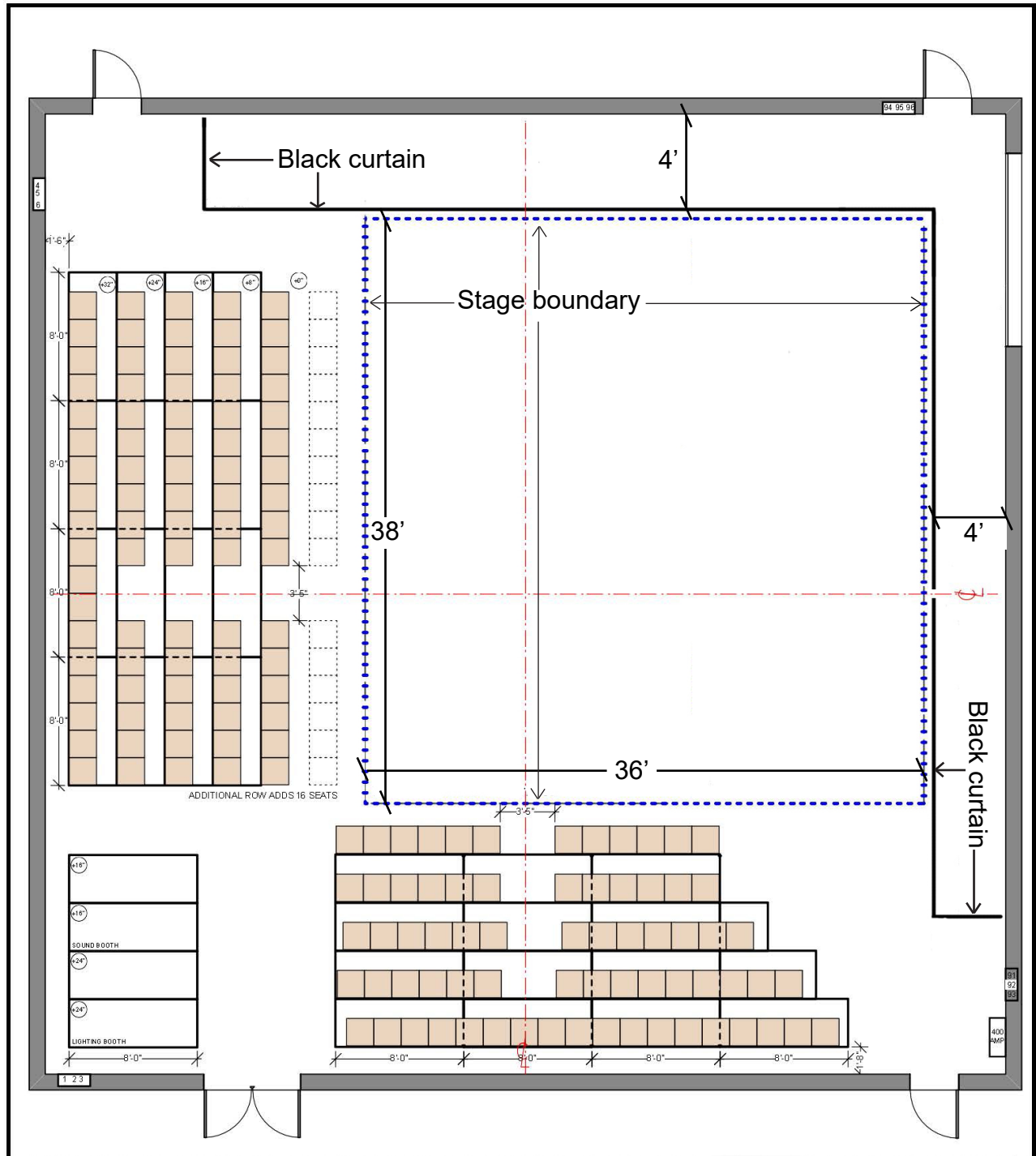
II. ELIGIBILITY FOR ENTRY

This event is open to High School TSA Chapters. Entries are limited to one (1) team of 2-6 students per chapter.

III. SPECIFIC REGULATIONS

The Design:

- A. The set design is based on the show specified in the annual design challenge. For 2017-2018 the production is: “You Can’t Take It With You” by Moss Hart and George S. Kaufman. The script can be downloaded here: http://www.rodrama.com/uploads/1/3/7/7/13777823/you_cant_take_it_with_you.pdf,
- B. Participants must be prepared to make an oral presentation of the design concept which will include information on how it supports the script, as well as the practicality and usability of the set design.
- C. The design must be the work of the students and should be completely original.
- D. Participants will prepare working drawings/floor plan of the set drawn to the scale of 1/2” = 1’ (1:24).
- E. The set is to be designed for a stage with the following specifications (see illustration on next page). Any mobile set pieces should fit within the wing/backstage area when not in use. Mobile set pieces should be included in the design/model presented.
 - Stage - The stage area within which to work is 36’ wide x 38’ deep. All set pieces must remain in this area and not extend into the audience area.
 - “Backstage” - From wall of theatre to black curtain - 4’ (both sides)



* Note: Drawing is not to scale.

Colorado TSA Black Box Theatre	
The COTSA Fine Arts Center 9101 E. Lowry Blvd. Denver, CO 80230	
	



Theatrical Set Design

- Exit Doors - There is one (1) 36” wide standard door leading to dressing/green rooms/theatre exit for the actors to use located in the northeast corner the theatre. There are two main doors (each 36” wide) through which the audience enters located in the southeast corner of the theatre. There are two (2) emergency exit doors (each 36” wide) located in the southeast northwest corners of the theatre. These are emergency exits only and not for use by the actors. There is also an 8’ high x 16’ wide garage door which leads to the workshop. The workshop area may be used for storage of set pieces while not on stage.
- Fly Space - There is no fly system above the stage; only working area for lighting systems.
- Actor Movement: Space should be allotted for actor movement.
- Mobile Set Pieces: Any mobile set pieces should be included in the model.
- Curtains - The stage is bounded on two sides by black curtains, masking the “back stage” area.

F. Mentorship: The design team is required to seek the mentorship of an architect, set designer or other related professional and must document the mentorship for inclusion in the portfolio (see Mentorship Verification form).

The Documentation:

- A. Documentation materials (comprising “a portfolio”) are required and should be secured in a clear front report cover. The portfolio includes the following single-sided, 8½” x 11” pages, in this order:
- Title page with the event title, the conference city and state, the year, and the team/chapter ID number; one (1) page
 - Table of contents
 - LEAP documentation (HS Team Resume)
 - Table of contents; pages as needed
 - A description of how the individual/team interpreted the design challenge and an explanation of the style and merits of the design concepts; one (1) page
 - A schedule of finish materials for all surfaces of the final set design, including colors, fabrics, building materials (samples may be included as supplemental materials (NOTE: This is not a list of the materials used to construct the model!). Pages as needed.
 - Initial design sketches of set design and printer/plotter-generated copies of CAD drawing of the set’s floor plan (each drawing to be submitted on maximum drawing sheet cut size B [11” x 17”] with appropriate scale size noted on the drawing); pages as needed
 - An elevation view of the design from the audience perspective.
 - A suggested lighting plot for the set.

Theatrical Set Design

- A 3-D modeling/rendering drawing of the individual/team's final design with appropriate details included; drawing sheet size B, 11" x 17"; one (1) page
- Plan of Work log that indicates preparation for the event, as noted by date, task, time involved, team member responsible, and comments (see Plan of Work log); pages as needed
- Mentorship Verification form; one (1) page
- List of resources/references; pages as needed
- Nothing that identifies a participant's name, school, or chapter can be included on the model or in the documentation portfolio.

The Model:

A. Model construction concepts, materials, techniques, and applications:

- The model is to be on a 24" x 24" site board and built at a scale of $1/2" = 1'$ (1:24 scale) and centered in the middle of the site board; allow for a perimeter around the entire model.
- The model should include the set area and any immediate backstage areas (e.g., wing areas), not any workshop or green room areas.
- Balsa wood, illustration board, or foam core or similar materials are suggested for (but not limited to) use as set walls, etc.
- Foam core board that is $1/2"$ thick or greater is recommended for use as the site board for the model.
- Dowels may be used to represent columns or circular components.
- Participants should pay close attention to the scale of all materials as they relate to the scale of the model.
- The model may not include any electrical or battery-powered enhancements.
- No glass or liquid may be used as part of any model.



Theatrical Set Design

IV. PROCEDURES

- A. Participants work to complete their entry according to the event regulations.
- B. Participants check in their entries at the time and place stated in the conference program. No more than two (2) team members submit and place the model and documentation.
- C. Entries are reviewed by evaluators. Neither students nor advisors are present at this time. A semifinalist list in random order is posted.
- D. The individual semifinalist or two (2) representatives from each semifinalist team report to the event area at the time and place stated in the conference program. Semifinalists will sign up for a presentation/interview time and arrive at their specified time.
- E. Semifinalists will use their models and documentation for reference during the presentation/ interview process.
- F. No more than two (2) team members pick up the team's entry from the display area at the time and place stated in the conference program.
- G. Go or No-Go Compliance - A design that receives a "No" answer to any of the requirements below will not be evaluated.
 - Is LEAP documentation present in the documentation portfolio? (Yes/No)
 - Is the portfolio in a clear plastic report cover? (Yes/No)
 - Does the portfolio contain all of the required elements (Yes/No)
 - Does a model accompany the portfolio? (Yes/No)
 - Does the model meet all the stated specifications? (Yes/No)

V. EVALUATION

Evaluation is based on points earned for the portfolio, the design process, the architectural model, and the semifinalist interview. For more specific information, please refer to the official rating form.



TECHNOLOGY STUDENT ASSOCIATION PLAN OF WORK

Date	Task	Time Involved	Team Member Responsible	Comments
1				
2				
3				
4				
5				
6				

Advisor Signature: _____



Theatrical Set Design

THEATRICAL SET DESIGN - HIGH SCHOOL

MENTORSHIP VERIFICATION

I certify that I have served as a mentor to the student(s) named below. (This completed and signed form is a requirement of individual/team participation in the TSA competition, Theatrical Set Design). Chapter advisors must verify the mentorship experience by signing this form.

Mentor (please print)

Occupation (please print)

Employer (please print)

Signature of Mentor

Date

Student(s) involved (please print)

Signature of student(s)

Date

TSA Chapter Advisor (printed name and signature)

Date



Mentor verification form	There is little or no effort to provide mentorship verification.	There is evidence that the mentor was available during the design process.	There is clear evidence of the appropriate use of the mentor in the design process.	
Resources/References	There is little or no effort to provide resources and references.	Resources and references included are generally presented appropriately.	There is clear evidence of the appropriate use of applicable resources and references.	
SUBTOTAL				

Design Challenge				
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points	
Effectiveness of Design	The design is ineffective in meeting the needs of the challenge.	The design is somewhat effective in meeting the needs of the challenge.	The design is exemplary and clearly effective in meeting the needs of the challenge.	
Access and flow	The design reflects an ineffective traffic flow pattern and use of space to gain access to the set.	The design reflects a somewhat effective traffic flow pattern and use of space to access the set.	The design presents a clear, effective traffic flow pattern and full consideration of the use of space.	
Aesthetic appeal	There is little evidence of consideration of aesthetics and audience appeal in the design.	There is some evidence that aesthetics and audience appeal have been considered in the design.	There is clear evidence that aesthetics and audience appeal are fully and effectively integrated into the design.	
Creativity and innovation	The design lacks originality and exhibits few, if any, creative and/or innovative applications.	Some unique, innovative, and creative concepts are incorporated in the overall design.	Unique, creative and innovative approaches have met the challenges of, and have been incorporated into, the design.	
SUBTOTAL				



Model			
	Minimal Performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10 points
Quality of construction	Construction is of poor quality & appearance, with little or no attention to neatness.	Construction is somewhat neat and has appropriate quality and appearance.	Construction is of excellent quality and exemplary appearance.
Use of materials	The choice of materials is ineffective and inadequate for the type and scale needed.	There is effective choice of materials and some attention to scale.	There is effective and excellent use of materials and accurate choice of scale.
Design representation	The model is ineffective in depicting the requirements of the design challenge.	The model is somewhat effective in depicting the requirements of the design challenge.	The model clearly and effectively incorporates and depicts all aspects of the design challenge.
			SUBTOTAL

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.
Indicate the rule violated: _____

--

(To arrive at the TOTAL score, add any subtotals and subtract rules violation points, as necessary.)	TOTAL SCORE
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Comments:

I certify these results to be true and accurate to the best of my knowledge.
Signature: _____

Printed name: _____





Colorado Technology Student Association

Event Summaries

Updated 9/22/2017



Event Summaries - Middle School

The following descriptions are only brief summaries about the events available to middle school students. For detailed information about each of the national events, please consult the current official Middle School National TSA Conference Competitive Events Guide. State-only event rules are detailed earlier in this guide. Please be sure to carefully read the event descriptions, regulations and procedures as event rules and specifications may have changed.

IMPORTANT NOTE: Several events have EARLY SUBMISSION deadlines. Events which have early submission deadlines are noted in these summaries as well as in the contest rules. For those events, unless otherwise stated, contestants are to submit documentation as a single, multi-page PDF document along with any other required elements (e.g., video links, contest entries [like Pin and T-Shirt designs], etc.) via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

For multimedia and video early submissions, entries for the state conference are required to be uploaded to YouTube on an unlisted channel and the URL (along with required documentation in PDF format) is to be submitted via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. **NOTE: Along with the summary description of the event is the number of entries allowed per chapter at the state conference. This number of entries is applicable only to the Colorado TSA State Conference; the number of entries permitted at the National TSA Conference are listed in the National TSA Competitive Events Guide.

Contest updates and clarifications for national events occur throughout the school year and are available at: <http://www.tsaweb.org/Updates-and-Clarification>. Advisors and students are urged to check this site periodically throughout the year to prevent a disqualification at the state or national conferences. Themes for the various events are available at: <http://www.tsaweb.org/Themes-and-Problems>.

*****NOTE: Along with the summary description of the event is the number of entries allowed per chapter at the state conference. This number of entries is applicable only to the Colorado TSA State Conference; the number of entries permitted at the National TSA Conference are listed in the National TSA Competitive Events Guide.***



MIDDLE SCHOOL NATIONAL EVENTS

Biotechnology

Advances in science have had a tremendous impact in the area of biotechnology, helping us grow more disease-resistant plants, using our planet's resources more wisely, and understanding and using genetic engineering to our benefit. In this event, participants conduct research on a contemporary biotechnology issue of their choosing, document their research (student-performed research or a re-creation or simulation of research performed by the scientific community), and create a display. If appropriate, a model or prototype depicting an aspect of the issue may be included in the display. Semifinalist teams create a presentation and are interviewed about their topic.

Limited at State to: Three (3) teams of two (2) to six (6) students per chapter. For the semifinal round, a minimum of two (2) and a maximum of three (3) members participate.

CAD Foundations

Participants in this event have the opportunity to demonstrate their understanding of CAD fundamentals as they create a two dimensional (2D) graphic representation of an engineering part or object. For example, participants may be given an isometric drawing and be expected to generate the required 2D views, complete with dimensions.

Limited at State to: Two (2) students per chapter.

Career Prep

Participants conduct research on a selected technology-related career according to a theme posted on the TSA website, and use this knowledge to prepare a letter of introduction and a chronological skills resume. Semifinalists participate in a mock interview.

For 2018, students choose a career from one (1) of the following career clusters:

- Agriculture, Food & Natural Resources
- Manufacturing
- Finance
- Government & Public Administration

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit resume, letters and related materials as a single multi-page PDF file via our upload form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Limited to one (1) entry per student.



Challenging Technology Issues

Team members work together to prepare and deliver a debate-style presentation with participants explaining opposing views of a current technology issue. For 2017-2018, the topics are:

- Government Leaders and Social Media
- 1-to-1 Technology in School
- FAA Interference with Drones
- Impact of “self-driven” vehicles on society

Limited at State to: Three (3) teams of two (2) per chapter.

Chapter Team

Participants take a written parliamentary procedures test in order to qualify for the semifinals, where they perform an opening ceremony, dispose of three (3) items of business, and perform a closing ceremony within a specified time period.

Limited at State to: One (1) team of six (6) per chapter.

Children’s Stories

Participants create an illustrated children’s story that will incorporate educational and social values. The story may be written in a genre of choice. Examples are fables, adventures, non-fiction, fiction, and fairy tales. The story must revolve around the theme chosen for the given year.

For 2017-2018, the theme is “STEM Interactive”: Participants are to design an interactive book for elementary aged students in grades K-3 on a topic of their choosing in Science, Technology, Engineering or Mathematics (STEM).

Finalists will be given up to twelve (12) minutes to read their stories and share their illustrations with judges, and an additional five (5) minutes to answer judges’ questions.

Limited at State to: Three (3) teams of one to six (1-6) students per chapter. Finalist teams will have two (2) of those team members make the final presentation.

Coding (NEW EVENT!)

Participants will demonstrate their knowledge of computer science and coding by taking a written test. Semifinalists will further demonstrate their programming knowledge by participating in an on-site programming challenge.

Limited at State to: One (1) team of two (2) students per chapter.



Community Service Video

Participants create and submit a video that depicts the local TSA chapter's service with the American Cancer Society (ACS), national TSA's community service partner.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube's public spaces such as search results, a contestant's personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: One (1) entry per chapter with no more than six (6) students per entry.

Construction Challenge

Participants submit a scale model/prototype, with a portfolio that documents the use of their leadership and technical skills, to fulfill an identified community need related to construction. Semifinalists discuss their projects in a presentation and an interview.

Limited at State to: One (1) team per chapter; two (2) to four (4) representatives per team may participate in the semifinalist presentation/interview.

Digital Photography

Participants produce a digital album consisting of color or black and white digital photographs that represent or relate to the annual theme. Semifinalists produce a series of digital photographs taken at the conference site that are edited appropriately for the on-site task.

For 2017-2018, the theme for 2018 is "Heroes."

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG>. All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Two (2) students per chapter.



Dragster

Participants design and produce a race-worthy CO₂-powered dragster according to stated specifications, using only specified materials.

For 2018, the theme is: “*Throwback Design Challenge.*” Flash back in history to the late 1970s when TSA was AIASA and the event was called LSRAV (Land Speed Record Assault Vehicle). At that point in time, there were no “shell bodied cars.” For 2018, all four wheels must be completely exposed. No part of the body may cover any part of front or back wheels, while meeting the specifications listed in the competitive events guide and on the national TSA website at www.tsaweb.org/Themes-and-Problems.

Limited at State to: Three (3) students per chapter.

Electrical Applications

Participants take a written test of basic electrical and electronic theory to qualify as semifinalists. Semifinalists assemble a specific circuit from a schematic diagram using their own kit and make required electrical measurements. Semifinalists explain their solution during an interview.

Limited at State to: Three (3) students per chapter.

Essays on Technology

Participants will conduct research on specified subtopics of a broader technological area. The topic and subtopics for 2018 are:

RFID (Radio Frequency IDentification) technology uses radio-frequency electromagnetic fields to automatically identify and track tags attached to objects, animals, and humans. Students must research each of the following subtopics and be prepared to write an essay on one subtopic that will be designated on site at the conference.

- ▶ Uses of RFID in business and industry
- ▶ Uses of RFID in domestic animals, livestock, and wildlife
- ▶ Pros and Cons of RFID implantation in humans

Limited at State to: Three (3) students per chapter.

Flight

Participants study the principles of flight and design in order to fabricate a glider that stays in flight for the greatest elapsed time. The glider must be designed to be launched from a catapult that is provided on site. The design process is documented in a portfolio that is submitted for evaluation.

Limited at State to: Six (6) students per chapter.



Forensic Technology

Participants take a written test of basic forensic science theory to qualify as semifinalists. Semifinalists demonstrate their ability to use forensic technology and skills to collect from and analyze a mock crime scene.

Limited at State to: One (1) team of two (2) students per chapter.

Inventions and Innovations

Teams investigate and determine the need for an invention or innovation of a device, system, or process and then brainstorm ideas for a possible solution. Team entries must include documentation of the team's work, a display, and a model/prototype. Semifinalists make an oral presentation to a panel of judges (who act as venture capital investors) to persuade the panel to invest in their invention/innovation. Judges interview the participants.

Limited at State to: Three (3) teams of three (3) to six (6) individuals per chapter. Three (3) team members may participate in the semifinal round.

Junior Solar Sprint

Junior Solar Sprint (JSS), an Army Educational Outreach Program (AEOP), provides a hands-on opportunity for students to apply science, technology, engineering, and mathematics (STEM) concepts, creativity, teamwork, and problem-solving skills as they design, construct, and race a solar-powered car.

Limited at State to: One (1) team of two (2) to four (4) students per chapter. Participants may be part of a registered TSA chapter or part of a group that competes at an approved Army host site.

Leadership Strategies

Participants demonstrate leadership and team skills by preparing a presentation based on a selected challenge that officers of a TSA chapter might encounter.

Limited at State to: Three (3) teams of three (3) per chapter.

Mass Production

Participants manufacture a marketable product related to the current year's theme. The team submits a documentation portfolio of the activities and the product—three (3) identical—made during the manufacturing process. For 2018, the theme is: *Geometric Puzzles*.

Limited at State to: One (1) team of two (2) to six (6) students per chapter. Two (2) members of a team must be present at a finalist presentation/interview.



Mechanical Engineering (NEW!)

Teams will design and build a “Rube Goldberg” mechanical device. This device will contain three (3) subsystems within a larger system. Each subsystem will contain all six (6) simple machines in a fun and inventive way. The final solution is open-ended to maximize creativity. The transfer of energy in the device will travel a specific path from start to finish for a minimum of seven (7) seconds per board. The device must be self-powered utilizing kinetic energy. The device must be capable of repeated demonstrations without long setup times. Semifinalists participate in a presentation/interview.

Limited at State to: One (1) team of three (3) to six (6) members per chapter.

Medical Technology Issues

Participants conduct research on a contemporary medical technology issue of their choosing, document their research and solution, and create a display. The entry may include student research or a re-creation or simulation of research performed by the scientific community. If appropriate, a model or prototype depicting an aspect of the issue may be included in the display. Semifinalists give a presentation/interview.

Limited at State to: Three (3) teams of two (2) to six (6) individuals per chapter. The semifinalist presentation must include two (2) to three (3) members of the team.

Microcontroller Design

Teams develop a working digital device (product) with real-world applications. Through a multimedia presentation, product demonstration, and documentation, the team demonstrates in detail its knowledge of microcontroller programming, simple circuitry, and product design and marketing. The project should have educational and social value, and conform to the theme for the year. Teams demonstrate and promote their work in a timed presentation.

The theme for 2018 is: *Wearable Technology*

Limited at State to: One (1) team of three to five (3-5) members per chapter. Up to three (3) team members may participate in the presentation.

Off the Grid (NEW!)

Throughout the world, people are working to become more self-sustaining when it comes to landscaping and architectural design. Sometimes the purpose is to live off the grid, and other times it is to create a smaller carbon footprint. There are many options throughout the world, but sometimes a location limits or enables those options. In this event, participants conduct research on a sustainable architectural design for a home in a country of the team’s choosing (other than their home country). Teams will create a display and a model. The model can be of the home the team designed or of a specific aspect of their design. Semifinalist teams will give a presentation and are interviewed about their design.

For 2018, the theme is: Design a home for a family of four (4) and one (1) pet specific to the country of the participant’s choosing.

Limited at State to: Three (3) teams of two (2) to six (6) members per chapter.



Prepared Speech

Participant delivers a speech that reflects the theme of the current national TSA conference. The theme for 2018 is: “*A Celebration of Success.*”

Limited at State to: Three (3) students per chapter.

Problem Solving

Participants must work effectively as a team to manipulate and process materials using only the tools designated. An objective measurement is used to determine the best solution to the given problem.

Limited at State to: Two (2) teams of two (2) members per chapter.

Promotional Marketing

Participants create marketing tools that could be used in a TSA Promotional Kit. The theme and required elements for this event will be posted on the TSA website under Competitions/Themes and Problems. Semifinalists are asked to work creatively under constraints to design a solution to a problem given on site, using their own computer/laptop work station.

The design challenge for 2018 is: 1) Design an 11” x 17” poster advertising a chapter fundraiser to attend the 2018 National TSA Leadership Conference; 2) Design a one-color 6” x 6” logo for a royal blue drawstring bag for your chapter; and 3) Create a two (2) minute advertisement for the 1st TSA meeting of the school year to be played on the TVs in the school’s lobby

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube’s public spaces such as search results, a contestant’s personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL and the documentation portfolio containing the poster and logo as a single, multi-page PDF by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Three (3) students per chapter.



STEM Animation

Participants use computer graphics tools and design processes (i.e., animation) to communicate, inform, analyze and/or illustrate a topic, idea, subject, or concept that focuses on one (1) or more of the following areas: science, technology, engineering, or mathematics (STEM); sound may accompany graphic images. Semifinalists make a presentation.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube’s public spaces such as search results, a contestant’s personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Six (6) teams of one to six (1-6) students per chapter, one (1) entry per team.

Structural Engineering

Teams apply the principles of structural design and engineering through basic research, design, construction, and destructive testing to determine the design efficiency of a structure. The on-site finalist problem will be a variation of the pre-conference problem.

For 2018, participants will research, design and build a section of a pedestrian bridge structure. The complete design brief is available on the Themes and Problems page of the National TSA website: <http://www.tsaweb.org/Themes-and-Problems>.

Limited at State to: Two (2) teams of two (2) per chapter.

System Control Technology

Participants use a team approach to develop a computer-controlled model solution to a given problem, typically one based on an industrial setting. Teams analyze the problem, build a computer-controlled mechanical model, program the model, explain the program and mechanical features of the model-solution, and leave instructions for judges to operate the device.

Limited at State to: One (1) team of three (3) per chapter.

Tech Bowl

A team of three (3) students complete a written test and then compete in a head-to-head competition similar to “Jeopardy” where students “buzz-in” and answer technical questions orally. ***The oral rounds are CLOSED to observers at the state conference.***

Limited at State to: One (1) team of three (3) per chapter.



Technical Design

Participants demonstrate their ability to use the technical design process to solve an engineering design problem on site at the conference.

Limited at State to: Two (2) teams of two (2) individuals per chapter.

Video Game Design

Participants develop, build, and launch an E-rated, online game that focuses on the subject of their choice. The game should be interesting, exciting, visually appealing, and intellectually challenging. The game and all required documentation must be submitted — and will be evaluated — online, pre-conference. Semifinalist teams participate in an on-site interview to demonstrate the knowledge and expertise they gained during the development of the game.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the URL of the game via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG>. Contestants should provide the URL in the space provided and upload the documentation portfolio as a single, multi-page PDF document. All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: One (1) team of two (2) to six (6) students per chapter.

Website Design

Participants are required to design, build, and launch a website that features the team's ability to incorporate the elements of website design, graphic layout, and proper coding techniques. The design brief for this event will be posted on the TSA website (www.tsaweb.org) under Competitions/Themes and Problems. Semifinalists participate in an on-site conference interview, with an emphasis on web design as it pertains to their solution to demonstrate the knowledge and expertise gained during the development of the website.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit the URL (which points to the main page of the team's entry) via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> no later than 11:59 p.m. on February 1, 2018. After 11:59 p.m. on February 1 changes should not be made to the website. If the team makes changes or updates to the website after the evaluators begin judging the entry, those changes will not be considered. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: One (1) team of three (3) to six (6) members per chapter. One (1) entry per team is permitted. Up to six (6) members of a team participate in the interview.



MIDDLE SCHOOL STATE-ONLY EVENTS

Catapult Design (MODIFIED)

Participants design and produce a working catapult, within specified guidelines, that is adjustable and propels hollow plastic practice golf balls (weighing about 14.5 grams each) at a scoring target between 15' and 25' away.

Limited at State to Three (3) teams of two to four (2-4) students per chapter.

Colorado Statesman (NEW!)

The Colorado TSA Statesman recognizes TSA members who excel in knowledge of the organization, its foundation and its history. Statesman exam is given at the annual State Conference.

Limited to: One (1) entry per student.

Chapter Service Project (NEW!)

Colorado TSA chapters engage in a large number of community service projects at the local level, beyond their work with the national service partner. This event is designed to evaluate local chapter activities that benefit the local community and to recognize excellence and professionalism in the area of community service. This event also enables the community to become aware of the outstanding work being performed by the TSA chapter.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Each participating chapters should submit their documentation portfolio as a single, multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited to: One (1) entry per chapter, with three (3) students representing the chapter for the onsite presentation.

Crash Test

Teams consisting of a middle school student and an elementary student design and build a “crash test” car that will be tested in multiple head-on and rear-end collisions. The theme for 2016-17 is: Recreational Vehicle.

Limited to: Ten (10) teams of two (2) students per chapter. Each team MUST include one (1) MS and one (1) Elementary student (grades 1-5).



Fashion Design

Students have the opportunity to research, develop, and create garment designs, garment mock-ups, and portfolios that reflect the current year's published theme. At the state competition, teams participate in an on-site event in which they present their potential designs to the judges and an audience. For 2017, the theme is wedding fashions from around the world.

Limited at State to: Two (2) teams of two to four (2-4) students per chapter.

Giant Jenga Tournament

Teams take turns in this bracketed-tournament competition to build the tallest structure possible without tipping it over.

Limited to: Three (3) teams of two to four (2-4) students per chapter. NOTE: This event does not earn medals. Winners of this event are awarded the traveling Giant Jenga Trophy.

Middle School Creativity Challenge

Design teams, composed of one middle school student and one elementary student, work to solve an on-site problem.

Limited to: Ten (10) teams of two (2) students per chapter. Each team MUST include one (1) MS and one (1) Elementary student (grades 1-6* See rules for more information).

Mousetrap Tractor Pull

Participants design, build and test a model vehicle powered only by a standard mousetrap. The vehicle is tested by having it pull as much weight as possible over a set distance.

Limited to: Six (6) students per chapter.

On Demand Video

Participants write, shoot, and edit a short video during the conference in this on-site event. Required criteria, such as props and a line of dialogue, make the competition more challenging and will be revealed at the event orientation meeting.

Limited at State to: One (1) team of two to six (2-6) students per chapter.



Pin Design

Participants design a lapel pin representative of Colorado and Colorado TSA to be used for trading at the National TSA Conference. The winning middle school and winning high school designs will be made into pins for trading.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit entry as a single, multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited to: One (1) entry per student.

Robotic Design (NEW!)

Participants will design, build and test a remote controlled robot to carry out a specific challenge. The annual design brief/challenge as well as course specifications and construction materials are located on the Colorado TSA website at: (<http://cotsa.cccs.edu/colorado-tsa-state-conference/>).

Limited to: Two (2) teams of two to four (2-4) students per chapter.

Rubber Band Powered Car

Participants design, build and then race a rubber band-powered propeller car that resembles a commercially produced automobile.

Limited to: Three (3) students per chapter.

SeaPerch (NEW!)

Participants apply and document the engineering design process, mathematical principles and scientific concepts used in the research, design, construction, testing and evaluation of an underwater remote operated vehicle (ROV). The ROV will be expected to perform a range of tasks including navigating an obstacle course and performing a timed set of challenges. This event is a qualifier for the National SeaPerch competition.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the engineering notebook as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG>. All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited to: Two (2) teams of 2 (two) to six (6) students per chapter.



Silent Movie

Participants demonstrate their abilities and skills in the field of music and digital video production to create a “silent movie” and then create a musical score to accompany the film.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube’s public spaces such as search results, a contestant’s personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: One (1) team of two to six (2-6) students per chapter.

T-Shirt Design

Participants design the Colorado delegation’s national conference T-shirt. The winner between the middle and high school top finishers will become the state delegation T-shirt. ***NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit entry as a single, multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.***

Limited to: One (1) entry per student.



Event Summaries - High School

The following descriptions are only brief summaries about the events available to students. For detailed information about each of the national events, please consult the official High School National TSA Conference Competitive Events Guide. State-only event rules are detailed earlier in this guide. Please be sure to carefully read the event descriptions, regulations and procedures!

IMPORTANT UPDATE: Several events have EARLY ELECTRONIC SUBMISSION deadlines. Events which have early submission deadlines are noted in these summaries. For those events, unless otherwise stated, contestants are to submit documentation as a single, multi-page PDF document with all the required elements, any related links (to download videos or game files, for example), and contest entries (like Pin and T-Shirt designs) via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

For multimedia and video early submissions, entries will be required to be uploaded to YouTube on an unlisted channel and the URL (along with required documentation in PDF format) is to be submitted via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Contest updates and clarifications occur throughout the school year and are available at: <http://www.tsaweb.org/Updates-and-Clarification>. Advisors and students are urged to check this site periodically throughout the year to prevent a disqualification at the state or national conferences. Themes for the various events are available on the National TSA website at <http://www.tsaweb.org/Themes-and-Problems>.

*****NOTE: Along with the summary description of the event is the number of entries allowed per chapter at the state conference. This number of entries is applicable only to the Colorado TSA State Conference; the number of entries permitted at the National TSA Conference are listed in the National TSA Competitive Events Guide.***



HIGH SCHOOL NATIONAL EVENTS

3D Animation

Participants demonstrate their knowledge of 3D animation technology and design skills to creatively solve the challenge posted on the national TSA website. Semifinalists participate in an on-site competition in which they further demonstrate their 3D design skills and proficiency in 3D animation technology.

For 2018, the challenge is to design and model an inventor's workshop with clues as to who the inventor is as well as their current (and past) inventions and/or plans. The complete design brief can be found on the Themes and Problems page of the national website: <http://www.tsaweb.org/Themes-and-Problems>.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube's public spaces such as search results, a contestant's personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Three (3) teams of two (2) individuals per chapter.

Animatronics

Participants work as a team to demonstrate knowledge of mechanical and control systems by designing, fabricating, and controlling an animatronics device that will communicate, entertain, inform, demonstrate and/or illustrate a topic, idea, subject or concept. Sound, lights and surrounding environment are to accompany the device.

For 2018, the challenge is to: *Create an interactive animatronic robot for a local Zoo or aquarium.*

Limited at State to: Two (2) teams of two to six (2-6) individuals per chapter with a limit of three (3) representatives per team for the presentation/interview.

Architectural Design

Participants develop a set of architectural plans and related materials for an annual architectural renovation design challenge and construct a physical as well as computer-generated model to accurately depict their design.

The design brief for 2018 can be found on the Themes and Problems page of the national website: <http://www.tsaweb.org/Themes-and-Problems>.

Limited at State to: Three (3) teams of one to six (1-6) students per chapter.



Biotechnology Design

Participants select a contemporary biotechnology problem that relates to the current year's published area of focus and demonstrate understanding of it through documented research, the development of a solution, a display, and an effective multimedia presentation. If appropriate, a model or prototype of the solution may be included in the display. Participants may choose to recreate or simulate research that previously has been performed within the scientific community.

The theme for 2018 is: *Food*.

Limited at State to: Three (3) teams of two to six (2-6) members per team with a limit of two (2) representatives per team for the finalist presentation.

Chapter Team

Participants take a written parliamentary procedures test in order to qualify for the semifinals, where they perform an opening ceremony, dispose of items of business, and perform a closing ceremony within a specified time period.

Limited at State to: One (1) team of six (6) per chapter.

Children's Stories

Participants create an illustrated children's story of high artistic, instructional, and social value. The story may be written in prose or poetry and take the form of a fable, adventure story, or other structure.

For 2018, the challenge is: *Create an electronically enhanced book.*

Limited at State to: Three (3) teams of one to six (1-6) students per chapter. Finalist teams will have two (2) of those team members make the final presentation.

Coding

Participants respond to an annual coding-related design challenge by developing a software program that will accurately address an on-site problem in a specified, limited amount of time. Specific elements to be used, such as the programming language, operating system, or application programming interface (API), will be released on-site. Completed solutions will be objectively measured to determine the best and most effective solution for the stated problem.

Limited at State to: Two (2) teams of one to three (1-3) members per chapter.



Computer Aided Design - Architecture

Participants create representations, such as foundation and/or floor plans, and/or elevation drawings, and/or details of architectural ornamentation or cabinetry. Participants may compete in CAD - Architecture or CAD - Engineering, but not both.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, contestants will participate in a preliminary round at the state the conference to determine finalists. Finalists will then compete in a 2.5 hour-long on-site challenge. Please plan appropriately when preparing for this event.

Limited at State to: Three (3) students per chapter with only one (1) CAD event per student.

Computer Aided Design - Engineering

Participants create a 3D computer model(s) of an engineering or machine object, such as a machine part, tool, device, or manufactured product. Participants may compete in CAD - Architecture or CAD - Engineering, but not both.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, contestants will participate in a preliminary round at the state conference to determine finalists. Finalists will then compete in a 2.5 hour-long on-site challenge. Please plan appropriately when preparing for this event.

Limited at State to: Three (3) students per chapter with only one (1) CAD event per student.

Computer Integrated Manufacturing

Participants design, fabricate, and use Computer Integrated Manufacturing (CIM) to create a promotional TSA product that will showcase the current conference city and/or state. The product may use additive and/or subtractive manufacturing of any traditional, Computer Numerical Control (CNC), 3D printing, or laser technology available. Documentation, one completed sample, and one set of manufactured parts are checked in and evaluated. Semifinalist teams assemble their entry and give a live promotional sales pitch to judges.

Limited at State to: Three (3) teams of two (2) individuals per chapter

Debating Technological Issues

Team members work together to prepare for a debate against a team from another chapter. The teams will be instructed to take either the pro or con side of the designated topic.

For 2018, the Topic is: *Information Security in Modern Life*. The subtopics can be found on the Themes and Problems page of the National TSA website at <http://www.tsaweb.org/Themes-and-Problems>.

Limited at State to: One (1) team of two (2) members per chapter.



Digital Video Production

Participants develop a digital video/film that focuses on the given year's theme. Sound may accompany the film. For 2018, the theme is: *Create a TSA Competitive Event Infomercial.*

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube's public spaces such as search results, a contestant's personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Three (3) teams of two (2) to six (6) students per chapter.

Dragster Design

Participants design, produce working drawings for, and build a CO₂- powered dragster.

Limited at State to: Three (3) students per chapter.

Engineering Design

The National Academy of Engineering has identified fourteen (14) paramount current and emerging societal challenges that engineering can play a major role in solving. Through research and critical problem-solving, teams will develop a solution to a grand challenge posted on the national TSA website under Competition Themes/Problems. The solution offered will be informed and designed by precise problem definition, thorough research, creativity, experimentation (when possible), and the development of documents and appropriate models (mathematical, graphical, and/or physical prototype/model). Semifinalist teams will present and defend their proposed solution to a panel of evaluators. The semifinalist presentation will be in the format of a poster session (the poster will be contained in a display).

For 2018, the theme is: *Engineer the Tools for Scientific Discovery*

Limited at State to: Three (3) teams of three to six (3-6) people per chapter.

Essays on Technology

Participants will write a research-based essay using two (2) or more sources provided on-site, that makes insightful connections about a current technological topic. Participants are required to bring and use a laptop computer to prepare the essays.

Limited at State to: Three (3) students per chapter.



Extemporaneous Presentation

Participants give a three to five (3-5) minute speech fifteen (15) minutes after having drawn a card on which a technology or TSA topic for their speech is written.

Limited at State to: Three (3) students per chapter.

Fashion Design & Technology

Students have the opportunity to research, develop, and create garment designs, garment mock-ups, and portfolios that reflect the current year's published theme. At the state competition, teams participate in an on-site event in which they present their potential garment designs to the judges on a TSA runway.

For 2018, the theme is: *1980s Fashion - Trends and Styles*. Teams should design and create from scratch three (3) garments that represent one (1) of the 1980's era fashion trends.

Limited at State to: Two (2) teams of two to four (2-4) students per chapter.

Flight Endurance

Participants analyze flight principles with a rubber band-powered model aircraft. Participants have the opportunity to build, fly, and adjust (trim) a model to make long endurance flights inside a contained airspace. Models must be of fixed-wing design and comply with all event specifications. Rotary-wing aircraft and aerostat (lighter than air) aircraft are NOT permitted.

Limited at State to: Three (3) students per chapter.

Future Technology Teacher

While the need for student proficiency in technology (as one area of STEM) is increasing, the number of qualified technology education teachers is decreasing. To help address this imbalance, this event will encourage participants to 1) investigate technology education preparation programs in higher education, and 2) test their potential as a future technology educator.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit entry as a single, multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Three (3) students per chapter.



Music Production

Participants produce an original musical piece that is designed to be played during the national TSA conference opening or closing general sessions. The musical piece should be energizing, interesting and of a spirit consistent with the Technology Student Association. **NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry as an .mp3 or .wav file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Any accompanying documentation should also be uploaded as a single, multi-page PDF file at that time. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.**

Limited at State to: Six (6) teams of one to six (1-6) students per chapter.

On Demand Video

Participants write, shoot, and edit a short video during the conference in this on-site event. Required criteria, such as props and a line of dialogue, make the competition more challenging and will be revealed at the event orientation meeting. **NOTE: Due to the length of the state conference, this event's length will be shortened to fit within the allotted time.**

Limited at State to: One (1) team of two to six (2-6) students per chapter.

Photographic Technology

Participants have the opportunity to demonstrate understanding of and expertise in using photographic and imaging technology processes to convey a message. Participants produce a portfolio of five (5) powerful images focusing on the given theme. Semifinalists record images and then utilize graphic editing software to prepare a single final image as a solution to an on-site prompt.

For 2018, the theme is: *The Battle Between Nature and Technology - Who Wins?*

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG>. All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Two (2) students per chapter.

Prepared Presentation

Participants have the opportunity to develop and deliver an oral presentation using a digital slide deck on an assigned topic provided on-site.

Limited at State to: Three (3) students per chapter.



Promotional Design

Participants have the opportunity to use computerized graphic communications layout and design skills in the production of a promotional resource for TSA. Participants produce an original multi-piece marketing portfolio to be used for TSA chapter recruitment, or as an introductory packet for new TSA advisors/teachers. This promotional packet would be mailable and would include four to five (4-5) separate and different items. The packet must provide details about TSA, its history, its co-curricular relationship with Engineering and Technology pathway courses, its membership guidelines and instructions for joining, the competitive events program, signature events, service projects, STEM connections, leadership training activities, and sample chapter membership recruitment items. Portfolio examples might include: a pamphlet, post card, letter, small poster, business card, and a PDF of a color graphic for branding promotional gifts. The complete portfolio must demonstrate a unity of design that repeats throughout the included items. Semifinalists respond to an on-site problem with a solution that demonstrates their ability to use a computer to design and edit materials for in-house publication.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry as PDF document via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG>. All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Six (6) students per chapter.

SciVis

Scientific and Technical Visualization (SciVis) is the representation of complex scientific and/or technical concepts in a visual form. Participants use either 2D or 3D computer graphics tools and design processes to communicate, inform, analyze, and/or illustrate a STEM topic, idea, subject, or concept.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube's public spaces such as search results, a contestant's personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID# when submitting their entry. Entries not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Three (3) teams of one to six (1-6) students per chapter.



Software Development

Participants have the opportunity to use knowledge of cutting-edge technologies, algorithm design, problem-solving principles, effective communication, and collaborative teamwork to design, implement, test, and document a software development project. The project should have educational or social value.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit the documentation portfolio and related materials as a single multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition. Only the documentation portfolio needs to be submitted early as all competitors will present their entries at the state conference. Contestants are to bring a working copy of their software on a computer capable of running the program to their presentation. Participants will demonstrate the program to the judges as part of the presentation.

Limited at State to: One (1) team of two to six (2-6) students per chapter.

STEM Careers

During the school year, participants work to develop a specific skill and complete a thorough project about the skill's relationship to a STEM career area of their choice. Participants research and prepare documentation related to the skill and prepare a video that demonstrates the skill. Semifinalists participate in an on-site interview to discuss the skill developed.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube's public spaces such as search results, a contestant's personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: Six (6) students per chapter.



Structural Design and Engineering

Participants work as a team to build a designated structure. Teams apply the principles of structural design and engineering through research, design, construction, destructive testing, and assessment to determine the design efficiency of the structure. Details about the structure and information related to it will be posted on the TSA website under Competitions/Themes and Problems. The on-site semifinalist problem will be a variation of the pre-conference problem posted on the TSA website.

The design brief for 2018 can be found on the Themes and Problems page of the national website, located here: <http://www.tsaweb.org/Themes-and-Problems>.

Limited at State to: Two (2) teams of two (2) students per chapter.

System Control Technology

Participants work as part of a team on site to develop a computer-controlled model-solution to a problem, typically one from an industrial setting. Teams analyze the problem, build a computer-controlled mechanical model, program the model, explain the program and mechanical features of the model-solution, and leave instructions for evaluators to operate the device.

Limited at State to: One (1) of three (3) students per chapter.

Technology Bowl

A written test followed by a knowledge bowl format like “Jeopardy” where students “buzz-in” and answer technical questions orally. ***The oral rounds are CLOSED to observers at the state conference.***

Limited at State to: One (1) team of three (3) students per chapter.

Technology Problem Solving

Participants work together to develop and create a solution to a problem using the limited materials provided and the tools allowed. Completed solutions will be objectively measured and judged to determine the best and most effective solution for the stated problem. Participants won’t know what the challenge is until they show up!

Limited at State to: Two (2) teams of two (2) students per chapter.

Transportation Modeling

Using only designated materials and following required specifications, participants research, design, and produce a scale model of a vehicle that fits the annual design problem, which is posted on the TSA website under Competitions/Themes and Problems. The entry must take appearance and realism into consideration. For 2018, the theme is: *The History of Stock Car Racing*.

Limited at State to: Three (3) students per chapter.



Video Game Design

Participants develop a game that focuses on the subject of their choice. The game must be interesting, exciting, visually appealing, and intellectually challenging. The game must have high artistic, educational, and social value. For 2018, participants focus on the idea of their choice, within the context of the theme: *Sports Games*.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit the documentation portfolio and related materials as a single multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition. Only the documentation portfolio needs to be submitted by the early submission deadline. Representatives from each semifinalist team will then report to the event area at the time and place stated in the conference program, with the game pre-loaded and ready to play on their own laptop or computer, for an interview.

Limited at State to: Two (2) teams of two to six (2-6) students per chapter.

Webmaster

Participants are required to design, build, and launch a website that features the school's career and technology/engineering program, the TSA chapter, and the chapter's ability to research and present a given topic pertaining to technology (referred to as the "design brief"). Conference semifinalists participate in an on-site interview to demonstrate the knowledge and expertise gained during the development of the website — with an emphasis on web design methods and practices, as well as their research for the annual design topic.

For 2018, the theme is: Artificial Intelligence. The complete design brief can be found on the Themes and Problems page of the National TSA website: <http://www.tsaweb.org/Themes-and-Problems>.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the URL (which points to the main page of the team's entry) via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> no later than 11:59 p.m. on February 1, 2018. After 11:59 p.m. on February 1 changes should not be made to the website. If the team makes changes or updates to the website after the evaluators begin judging the entry, those changes will not be considered. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: One (1) team of three to five (3-5) students per chapter.



HIGH SCHOOL STATE-ONLY EVENTS

Colorado Statesman (NEW!)

The Colorado TSA Statesman recognizes TSA members who excel in knowledge of the organization, its foundation and its history. Statesman exam is given at the annual State Conference.

Limited to: One (1) entry per student.

Catapult Design (MODIFIED)

Participants design and produce a working catapult, within specified guidelines, that is adjustable and propels hollow plastic practice golf balls (weighing about 14.5 grams each) at a scoring target between 15' and 25' away.

Limited to: Three (3) teams of two to four (2-4) students per chapter.

Chapter Service Project (NEW!)

Colorado TSA chapters engage in a large number of community service projects at the local level, beyond their work with the national service partner. This event is designed to evaluate local chapter activities that benefit the local community and to recognize excellence and professionalism in the area of community service. This event also enables the community to become aware of the outstanding work being performed by the TSA chapter.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Each participating chapters should submit their documentation portfolio as a single, multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited to: One (1) entry per chapter, with three (3) students representing the chapter for the onsite presentation.

Fore!

Teams, composed of one high school student and one elementary student, design and develop one hole for a proposed miniature golf course.

Limited to: Ten (10) teams of two (2) students per chapter. Each team MUST include one (1) HS and one (1) elementary student (grades 1-5).



Giant Jenga Tournament

Teams take turns in this bracketed-tournament competition to build the tallest structure possible without tipping it over.

Limited to: Three (3) teams of two to four (2-4) students per chapter. NOTE: This event does not earn medals. Winners of this event are awarded the traveling Giant Jenga Trophy.

Global Logistics (**NEW EVENT!**)

Participants design, manufacture and package a marketable product through a collaborative effort with two other high school TSA chapters. Each of the 3 chapters involved will be responsible for different tasks and responsibilities, and will collaborate virtually with each other to create and deliver final product based on the current year's theme.

For 2018, the theme is: A child's toy for children ages 5-8.

Limited to: Entries are limited to one (1) team of three (3) separate High School TSA chapters, with a maximum of six (6) students per chapter. Two (2) representatives per chapter will participate in the interview portion of the contest, for a maximum of six (6) presenters. In the event that a school is unable to attend the conference, the remaining schools can substitute in representatives, for a total of up to six (6) presenters. All six (6) presenting students must be prepared to address all aspects of the process.

High School Creativity Challenge

Design teams, composed of one high school student and one elementary student, work to solve an on-site problem.

Limited to: Ten (10) teams of two (2) students per chapter. Each team MUST include one (1) HS and one (1) elementary student (grades 1-6* See rules for more information). NOTE: This is a non-competitive event and does not earn medals or points for a school toward the Chapter of the Year award.

Pin Design

Participants design a lapel pin representative of Colorado and Colorado TSA to be used for trading at the National TSA Conference. The winning middle school and winning high school designs will be made into pins for trading. **NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit entry as a single, multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.**

Limited to: One (1) entry per student.



Rat Trap Drag Race

Participants design and build a vehicle powered solely by a standard rat trap.

Limited to: Six (6) students per chapter.

Robotic Design (NEW!)

Participants will design, build and test a remote controlled robot to carry out a specific challenge. The annual design brief/challenge as well as course specifications and construction materials are located on the Colorado TSA website at: (<http://cotsa.cccs.edu/colorado-tsa-state-conference/>).

Limited to: Two (2) teams of two to four (2-4) students per chapter.

Rubber Band Powered Car

Participants design, build and then race a rubber band-powered propeller car that resembles a commercially produced automobile.

Limited to: Three (3) students per chapter.

SeaPerch (NEW EVENT!)

Participants apply and document the engineering design process, mathematical principles and scientific concepts used in the research, design, construction, testing and evaluation of an underwater remote operated vehicle (ROV). The ROV will be expected to perform a range of tasks including navigating an obstacle course and performing a timed set of challenges. This event is a qualifier for the National SeaPerch competition.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the engineering notebook as a single, multi-page PDF document via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG>. All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited to: Two (2) teams of 2 (two) to six (6) students per chapter.



Silent Movie

Participants demonstrate their abilities and skills in the field of music and digital video production to create a “silent movie” and then create a musical score to accompany the film.

NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should upload the entry to YouTube as an UNLISTED video (as an unlisted video, the video will not appear in any of YouTube’s public spaces such as search results, a contestant’s personal channel, or the Browse page. Only people with whom the link is shared will be able to view it). Once the video is uploaded, go to the COTSA Early Submission form located at: <http://goo.gl/hwsZvG> and submit the URL (along with required documentation in PDF format). All entries must be received by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

Limited at State to: One (1) team of two to six (2-6) students per chapter.

T-Shirt Design

Participants design the Colorado delegation’s national conference T-shirt. The winner between the middle and high school top finishers will become the state delegation T-shirt. **NOTE: Due to the complexity and the large number of entries in this event as well as the limited duration of the state conference, this event has an early submission deadline! Contestants should submit entry as a single, multi-page PDF file via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. on February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.**

Limited to: One (1) entry per student.

Theatrical Set Design

Participants develop a set of architectural plans and related materials for an annual theatrical set design challenge and construct a physical, as well as computer-generated model to accurately depict their design. For 2018, the set design is based on the production: *You Can’t Take It With You*.

Limited at State to: One (1) team of two to six (2-6) students per chapter.



Early Deadline Events - Middle School

The events listed below have an early submission deadline of February 1, 2018. Along with each event listed is a brief summary of what is to be submitted and in what format. All early submissions (PDFs, URLs, .MP3s, etc.) are to be uploaded via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. by February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

MIDDLE SCHOOL	
Event	What to Submit
Career Prep	Resume & letter of introduction as a single, multi-page PDF document.
Chapter Service Project	DOCUMENTATION: The required documentation as described in the rules is to be submitted as a single, multi-page PDF document via the COTSA Early Submission Entry Form.
Community Service Video	VIDEO: Video is required to be uploaded to YouTube as an unlisted video. URL to video is to be submitted online via the COTSA Early Submission Entry Form with the documentation portfolio. DOCUMENTATION: The required documentation as described in the rules (including any and all photographic consent forms/releases) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.
Digital Photography	DOCUMENTATION: The required documentation as described in the rules (including any and all photographic consent forms/releases) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.
Pin Design	DOCUMENTATION: The required documentation as described in the rules (including design) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.
Promotional Marketing	DOCUMENTATION: The required documentation as described in the rules (including design) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.
Robotic Design	DOCUMENTATION: The required documentation as described in the rules (including design) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.
SeaPerch	DOCUMENTATION: The required documentation as described in the rules (including design) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.

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Early Deadline Events - Middle School

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MIDDLE SCHOOL	
Silent Movie	<p>VIDEO: Video is required to be uploaded to YouTube as an unlisted video. URL to video is to be submitted online via the COTSA Early Submission Entry Form with the documentation portfolio.</p> <p>DOCUMENTATION: The required documentation portfolio as described in the rules (including consent/photo release forms) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.</p>
STEM Animation	<p>ANIMATION: The animation is required to be uploaded to YouTube as an unlisted video. The URL is to be submitted online via the COTSA Early Submission Entry Form with the documentation portfolio.</p> <p>DOCUMENTATION: The required documentation as described in the rules is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.</p>
T-Shirt Design	<p>DOCUMENTATION: Documentation portfolio (including design) as described in the rules is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.</p>
Video Game Design	<p>VIDEO GAME: The URL of the video game is to be submitted online via the COTSA Early Submission Entry form with the documentation portfolio.</p> <p>DOCUMENTATION: The required documentation as described in the rules is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.</p>
Website Design	<p>URL: The URL is to be submitted via the online Early Submission Entry Form.</p>



Early Deadline Events - High School

The events listed below have an early submission deadline of February 1, 2018. Along with each event listed is a brief summary of what is to be submitted and in what format. All early submissions (both PDFs and URLs) are to be uploaded via the COTSA State Conference Early Submission Entry Form located at: <http://goo.gl/hwsZvG> by 11:59 p.m. February 1, 2018. Contestants will need to enter their STATE CONFERENCE ID numbers when submitting their entries. Entries that are not submitted electronically or are not received by the deadline will NOT be considered for competition.

HIGH SCHOOL	
Event	What to Submit
3D Animation	<p><i>ANIMATION:</i> Video is required to be uploaded to YouTube as an unlisted video. The URL to video is to be submitted online via the COTSA Early Submission Entry Form.</p> <p><i>DOCUMENTATION:</i> The required documentation portfolio as described in the rules (including consent/photo release forms) is to be submitted as a single, multi-page PDF document is to be submitted via the Early Submission Entry Form.</p>
Chapter Service Project	<p><i>DOCUMENTATION:</i> The required documentation as described in the rules is to be submitted as a single, multi-page PDF document via the COTSA Early Submission Entry Form.</p>
Digital Video Production	<p><i>VIDEO:</i> Video is required to be uploaded to YouTube as an unlisted video. The URL to video is to be submitted online via the COTSA Early Submission Entry Form.</p> <p><i>DOCUMENTATION:</i> The required documentation portfolio as described in the rules (including consent/photo release forms) is to be submitted as a single, multi-page PDF document is to be submitted via the Early Submission Entry Form.</p>
Future Technology Teacher	<p><i>DOCUMENTATION:</i> The required documentation portfolio as described in the rules (including consent/photo release forms) is to be submitted as a single, multi-page PDF document is to be submitted via the Early Submission Entry Form.</p>
Music Production	<p><i>MUSIC:</i> Music is to be uploaded as an MP3 or WAV file via the online Early Submission Entry Form.</p> <p><i>DOCUMENTATION:</i> The required documentation portfolio as described in the rules (including consent/release forms) is to be submitted as a single, multi-page PDF document via the Early Submission Entry Form.</p>
Photographic Technology	<p><i>DOCUMENTATION:</i> Photo album as described in the rules as described in the rules (including consent/release forms) is to be submitted as a single, multi-page PDF document via the Early Submission Entry Form.</p>
Pin Design	<p>Design and related documentation as a single, multi-page PDF document is to be submitted via the Early Submission Entry Form.</p>

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Early Deadline Events - High School

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HIGH SCHOOL	
Promotional Design	Design and documentation portfolio as described in the rules as a single, multi-page PDF document online via the COTSA Early Submission Entry Form.
Robotic Design	DOCUMENTATION: The required documentation as described in the rules (including design) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.
SCIVIS	VISUALIZATION: The visualization is required to be uploaded to YouTube as an unlisted video. The URL is to be submitted via the online Early Submission Entry Form. DOCUMENTATION: The required documentation as described in the rules is to be submitted as a single, multi-page PDF document.
SeaPerch	DOCUMENTATION: The required documentation as described in the rules (including design) is to be submitted as a single, multi-page PDF document along with the video URL via the COTSA Early Submission Entry Form.
Silent Movie	VIDEO: Video is required to be uploaded to YouTube as an unlisted video. The URL to video is to be submitted online via the COTSA Early Submission Entry Form. DOCUMENTATION: The required documentation portfolio as described in the rules (including consent/photo release forms) is to be submitted as a single, multi-page PDF document is to be submitted via the Early Submission Entry Form.
Software Development	DOCUMENTATION: The required documentation portfolio (including source code) as described in the rules is to be submitted as a single, multi-page PDF document via the Early Submission Entry Form.
STEM Careers	VIDEO: The video is required to be uploaded to YouTube as an unlisted video. The URL is to be submitted via the online Early Submission Entry Form. DOCUMENTATION: The required documentation as described in the rules is to be submitted as a single, multi-page PDF document.
T-Shirt Design	Design and required documentation as described in the rules is to be uploaded to the online Early Submission Entry Form as a single, multi-page PDF document.
Video Game Design	The required documentation portfolio as described in the rules is to be submitted as a single, multi-page PDF document. The video game itself is NOT to be submitted.
Webmaster	The URL is to be submitted via the COTSA Early Submission Entry Form.



Middle School Event Eligibility

Below, please find the number of entries that may be submitted for events at both the STATE and National Conferences.

<i>NATIONAL EVENTS</i>		
EVENT	AT STATE	AT NATIONALS
Biotechnology	3 teams of 2-6 students per chapter	3 teams of 2-6 per state
CAD Foundations	2 students per chapter	2 students per state
Career Prep	1 entry per student	1 student per chapter
Challenging Tech Issues	3 teams of 2 students per chapter	3 teams of 2 students per state
Chapter Team	1 team of 6 students per chapter	1 team of 6 students per chapter
Children's Stories	3 teams of 1-6 students per chapter	1 team of 1-6 per chapter
Coding	1 team of 2 students per chapter	1 team of 2 students per chapter
Community Service Video	1 team of 1-6 students per chapter	1 team of 1-6 students per chapter
Construction Challenge	1 team of 2-4 students per chapter	1 team of 2-4 students per chapter
Digital Photography	2 students per chapter	3 students per state
Dragster	3 students per chapter	2 students per chapter
Electrical Applications	3 students per chapter	2 students per chapter
Essays on Technology	3 students per chapter	3 students per state
Flight	6 students per chapter	2 students per chapter
Forensic Technology	1 team of 2 students per chapter	1 team of 2 per chapter
Inventions & Innovations	3 teams of 3-6 students per chapter	1 team of 3-6 students per chapter
Junior Solar Sprint	1 team of 2-4 students per chapter	1 team of 2-4 students per chapter
Leadership Strategies	3 teams of 3 students per chapter	1 team of 3 students per chapter
Mass Production	1 team of 2-6 students per chapter	1 team of 2-6 students per chapter
Mechanical Engineering	1 team of 3-6 students per chapter	1 team of 3-6 students per chapter
Medical Technology Issues	3 teams of 2-6 students per chapter	3 teams of 2-6 students per state
Microcontroller Design	1 team of 3-5 students per chapter	1 team of 3-5 students per chapter
Off the Grid	3 teams of 2-6 students per chapter	3 teams of 2-6 students per state
Prepared Speech	3 students per chapter	1 student per chapter
Problem Solving	2 teams of 2 students per chapter	1 team of 2 students per chapter
Promotional Marketing	6 students per chapter	1 student per chapter
STEM Animation	6 teams of 1-6 students per chapter	3 teams of 1-6 per state
Structural Engineering	2 teams of 2 students per chapter	1 team of 2 students per chapter
System Control Technology	1 team of 3 students per chapter	1 team of 3 students per state
Tech Bowl	1 team of 3 students per chapter	1 team of 3 students per chapter
Technical Design	2 teams of 2 students per chapter	1 team of 2 students per chapter
Video Game Design	1 team of 2-6 students per chapter	1 team of 2-6 students per chapter
Website Design	1 team of 3-6 students per chapter	1 team of 3-6 students per chapter



Middle School Event Eligibility

<i>STATE ONLY EVENTS</i>	
EVENT	AT STATE
Catapult Design	3 teams of 2 students per chapter
Chapter Service Project	1 entry per chapter; 3 students per chapter present in semifinal round.
Colorado Statesman	1 entry per student
Crash Test	10 teams of 2 students per chapter - 1 must be an elementary student
Fashion Design	2 teams of 2-4 students per chapter
Giant Jenga Tournament	3 teams of 2-4 students per chapter
MS Creativity Challenge	10 teams of 2 students per chapter - 1 must be an elementary student
Mousetrap Tractor Pull	6 students per chapter
On-Demand Video	1 team of 2-6 students per chapter
Pin Design	1 entry per student
Robotic Design	2 teams of 2-4 students per chapter
Rubber Band Powered Cars	3 students per chapter
SeaPerch	2 teams of 2-6 students per chapter
Silent Movie	1 team of 2-6 students per chapter
T-Shirt Design	1 entry per student



High School Event Eligibility

Below, please find the number of entries that may be submitted for events at both the STATE and National Conferences.

<i>NATIONAL EVENTS</i>		
EVENT	AT STATE	AT NATIONALS
3D Animation	3 teams of 2 per chapter	3 teams of 2 per state
Animatronics	2 teams of 2-6 students per chapter	1 team of 2-6 students per chapter
Architectural Design	3 teams of 1-6 students per chapter	1 team of 1-6 students per chapter
Biotechnology Design	3 teams of 2-6 students per chapter	3 teams of 2-6 students per state
Chapter Team	1 team of 6 students per chapter	1 team of 6 students per chapter
Children's Stories	3 teams of 1-6 students per chapter	1 team of 1-6 students per chapter
CAD - Architecture	3 students per chapter	2 students per state
CAD - Engineering	3 students per chapter	2 students per state
Computer Integrated Manufacturing	3 teams of 2 students per chapter	1 team of 2 students per chapter
Debating Technological Issues	1 team of 2 members per chapter	3 teams of 2 students per state
Digital Video Production	3 teams of 2-6 students per chapter	3 teams of 1-6 students per state
Dragster Design	3 students per chapter	2 students per chapter
Engineering Design	3 teams of 3-6 students per chapter	1 team of 3-6 students per chapter
Essays on Technology	3 students per chapter	3 students per state
Extemporaneous Presentation	3 students per chapter	3 students per state
Fashion Design & Technology	2 teams of 2-4 students per chapter	3 teams of 2-4 students per state
Flight Endurance	3 students per chapter	2 students per chapter
Future Technology Teacher	3 students per chapter	3 students per chapter
Music Production	6 teams of 1-6 per chapter	3 teams of 1-6 per state
On-Demand Video	1 team of 2-6 students per chapter	1 team of 2-6 students per chapter
Photographic Technology	2 students per chapter	1 student per chapter
Prepared Presentation	3 students per chapter	3 students per state
Promotional Design	6 students per chapter	3 students per state
SciVis	3 teams of 1-6 students per chapter	3 teams of 1-6 per state
Software Development	1 team of 2-6 students per chapter	1 team of 2-6 students per chapter
STEM Careers	6 students per chapter	6 students per state
Structural Design & Engineering	2 teams of 2 students per chapter	1 team of 2 students per chapter
System Control Technology	1 team of 3 students per chapter	1 team of 3 students per state
Technology Bowl	1 team of 3 students per chapter	1 team of 3 students per chapter
Technology Problem Solving	2 teams of 2 students per chapter	1 team of 2 students per chapter



<i>NATIONAL EVENTS</i>		
EVENT	AT STATE	AT NATIONALS
Transportation Modeling	3 students per chapter	1 student per chapter
Video Game Design	2 teams of 2-6 students per chapter	3 teams of 2-6 students per state
Webmaster	1 team of 3-5 students per chapter	1 team of 3-5 students per chapter

<i>STATE ONLY EVENTS</i>	
EVENT	AT STATE
Catapult Design	3 teams of 2-4 students per chapter
Chapter Service Project	1 entry per chapter; 3 students per chapter present in semifinal round.
Colorado Statesman	1 entry per student
Fore!	10 teams of 2 students per chapter - 1 must be an elementary student
Giant Jenga Tournament	3 teams of 2-4 students per chapter
Global Logistics	1 team consisting of 3 separate HS TSA chapters, with a maximum of 6 students per chapter.
HS Creativity Challenge	10 teams of 2 students per chapter - 1 must be an elementary student
Pin Design	1 entry per student
Rat Trap Drag Races	6 students per chapter
Robotic Design	2 teams of 2-4 students per chapter
Rubber Band Powered Cars	3 students per chapter
SeaPerch	2 teams of 2-6 students per chapter
Silent Movie	1 team of 2-6 students per chapter
T-Shirt Design	1 entry per student
Theatrical Set Design	1 team of 2-6 students per chapter



Notes:

