



TORREY PINES SCIENCE OLYMPIAD APPLICATION PACKET

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Application Checklist Please submit the following:

- 1. Science Olympiad Registration Forms
- 2. Science Olympiad Student Availability Sheet
- 3. Science Olympiad Parent Volunteer Form
- 4. Science Olympiad Code of Ethics/ Parent or Guardian Permission Form
- 5. Science Olympiad Coach Form
- Science Olympiad Tax Deductible Contribution of \$100- checks should be made payable to: TPHS Foundation. Please write students name and Science Olympiad in the memo line.

Application Deadline – September 23, 2016

Applications must be turned in before school, during lunch, or after school to the student coordinators or Rm. 72. All student applications received after the deadline are subject to placement on a waiting list.

Important Dates

- SEP 9, 2016 Student Informational Meeting (Lecture Hall @ Lunch) SEP 21, 2016 **Online application Due** SEP 23, 2016 **Application Deadline** Turn in to coordinators before school, at lunch, or after school OCT TBA, 2016 Teams and Events Assignments revealed (Lecture Hall, during lunch) NOV 12, 2016 Science Olympiad Event Workshops @ Bernardo Heights Middle School (2:30 - 4 PM)FEB 17, 2017 **Closing Student Lunch Meeting** (Lecture Hall)
- FEB 18, 2017 2017 Division C San Diego Regional Science Olympiad Competition @ University City High School (7 AM – 6 PM)

TORREY PINES SCIENCE OLYMPIAD PROGRAM EXPECTATIONS FOR STUDENT PARTICIPATION

- 1. Students must register for events they wish to participate in. Students will have at least 3 events. It is possible that they may be assigned an additional event in order for one team to cover all 23 events. Students may request to be placed in 4 events. The number of events assigned is in the best interest of the team. The team will ideally comprise roughly of 25% seniors, 25% juniors, 25% sophomores, and 25% freshman, although they may vary. Students must list 8 events they would like. Coordinators will do their best to assign listed choices. However, other factors such as schedule parameters and team composition will also determine event assignments. Students are not guaranteed their choices.
- 2. Students are expected to do the work. Students must attend all coach event meetings and student lunch meetings. If they can't make a coach event meeting, they must notify the Coach IN ADVANCE by email with the reason for the absence. Coaches, parents, etc. may offer advice or assist with potentially dangerous tasks (e.g., cutting with a power saw), but they MAY NOT build the devices. The cost of building events and study materials will be covered by the team budget but if this budget is exceeded, parents and students are responsible for the additional cost of all materials used in device construction in the building events that study materials are not provided by coaches.
- 3. Students must compete at the Regional Competition on February 18, 2017 from 7 AM to 6 PM. It is mandatory that students as well as their parent(s) attend the competition on February 18, 2017 from 7:00 am 6:00 pm. Students may leave early after 3pm, but they will miss the Awards Ceremony.
- 4. After 3 unexcused absences from any event or lunch meeting, students are in jeopardy of losing their position on the team. Attendance will be monitored and more than 3 unexcused absences will jeopardize a student's position on the team. Good attendance will be rewarded after the competition.

TEAMS, MEETINGS, AND COMPETITIONS

1. Team and Event Assignments

Each Science Olympiad team is comprised of a maximum of 15 students. Torrey Pines will be entering up to 6 teams, but may enter less. Students will be assigned to teams / events initially based on their preferences, science courses, and overall team balance as well as the tryout test scores. This year there are five device building events and eighteen academic events. In order for each team to cover all 23 events, students will be required to participate in at least 3 events.

2. Lunch Meetings

The Science Olympiad Coordinators run the monthly lunch meetings. The meetings are used to pass out general information, to check student progress, to address any questions or concerns that the students may have, and to share information with other student participants. The Coordinators will send out emails notifying students of the exact date and location of the meetings. All student participants are expected to attend in order to stay informed and prepared for the Science Olympiad competition. Students must sign in when they arrive; ATTENDANCE WILL BE TAKEN.

3. Student/Coach Meetings

Students should plan on attending one full hour each week per event, with building events potentially requiring more time per week. SCIENCE OLYMPIAD IS A TEAM COMMITMENT SO ATTENDANCE WILL BE TAKEN. The meetings are used to coach students in the events, collaborate between team members, practice academic event competitions, construct and test devices. Study materials that have been distributed to a student must be returned to the coach after the Science Olympiad competition, otherwise students are financially responsible for replacement of the materials.

4. Regional Competition

This is an all-day competition held at University City High School on Saturday, February 18th, 2017. Students will need to arrive early for sign-in, preparation, and early set-up. Schedules, maps, and other information will be distributed before the competition. Parent volunteers assist at team headquarters, monitoring events, and escorting students to event competitions. It is mandatory that at least one parent be at the competition with their student all day.

5. Explanation of Point System

There is an exciting awards ceremony at the end of the day with overall place recognition awarded to schools as well as to team members by event. Schools that qualify to advance up to the State Competition may send one team of 15 students to represent their school at the State Competition tentatively set for April in Anaheim. The State Team is selected by a point system as follows. Points are awarded for each place won by the student (ie. 21 points for 1st place, 20 points for 2nd place and so on). Points are calculated for the top three events done by the student. In the event of a tie breaker, students may be selected by the events that they competed in if that serves the best interest of the team composition. The top ten students are selected for the State Team by points. The remaining five team members are selected by a combination of factors including points, seniority, as well as by events that best meet the needs of the team. Students on the State Team must commit to continue preparing at a more advanced level.

2016 - 2017 SCIENCE OLYMPIAD DIVISION C (HIGH SCHOOL) EVENT LIST

Life, Personal, and Social Science

Anatomy & Physiology - This event encompasses the anatomy and physiology of selected body systems, this year limited to nervous and endocrine systems and sense organs.

Disease Detectives - Students will use investigative skills in the scientific study of disease, injury, health and disability in populations or groups of people with a focus on Food Borne Illness.

Ecology* - Students will answer questions involving content knowledge and process skills in the area of ecology and adaptations in featured North American biomes.

Invasive Species - This event will test student knowledge of invasive species in local and national ecosystems.

Microbe Mission* - Teams will answer questions, solve problems and analyze data pertaining to microbes.

Earth & Space Sciences

Astronomy - Teams will demonstrate an understanding of stellar evolution and Type Ia supernova. **Dynamic Planet** - Students will demonstrate an understanding of the large-scale processes affecting the structure of Earth's crust (Tectonics).

Remote Sensing* - Participants will use remote sensing imagery, data and computational process skills to complete tasks related to climate change processes in the Earth system.

Rocks & Minerals* - Teams will demonstrate their knowledge of rocks and minerals.

Physics & Chemistry

Hovercraft* - Competitors may construct a self-propelled air-levitated vehicle with up to two battery-powered motors that turn one propeller each to levitate and move the vehicle down a track. Competitors must also be tested on their knowledge of classic mechanics and related topics.

Optics* - Teams must participate in an activity involving positioning mirrors to direct a laser beam towards a target. Teams must also be tested on their knowledge of geometric and physical optics.

Wind Power - Teams will build a blade assembly that consists of any kind of propeller/pinwheel/rotor attached to a CD which will be used to capture wind power. Students will also be tested on their knowledge relating to alternative energy. **Chemistry Lab** - Teams will demonstrate chemistry laboratory skills and answer questions related to thermodynamics and gas laws.

Forensics - Students will identify polymers, solids, fibers, and other materials in a crime scenario.

Material Science* - Teams will answer a series of questions or complete tasks involving the science processes of chemistry focused in the areas of materials science.

Technology & Engineering

Electric Vehicle - Teams must design, build and test one vehicle that uses electrical energy as its sole means of propulsion to travel as quickly as possible and stop close to a Target Point.

Helicopters* - Prior to the tournament teams design, construct, and test free flight rubber-powered helicopters to achieve maximum time aloft.

Robot Arm - Prior to the competition, teams must design, build, document and test one robotic device to move scoreable items.

Towers* - Prior to the competition, teams will design and build a Tower meeting requirements specified in the rules to achieve the highest structural efficiency.

Inquiry & Nature of Science

Experimental Design - Given a set of unknown objects, teams will design, conduct, analyze and write-up an experiment. **Game On -** This event will determine a team's ability to design and build an original computer game incorporating the theme provided to them by the supervisor using the program Scratch.

Hydrogeology - Students will manipulate a groundwater computer model, answer questions about groundwater concepts, and evaluate solutions, based on hydrogeological evidence, to reduce anthropogenic effects on groundwater. **Write It/Do It** - A technical writing exercise where students write a description of a contraption and other students will attempt to recreate it using only the written description.

*Denotes new event not available last year

TORREY PINES SCIENCE OLYMPIAD REGISTRATION FORM

Student Name _____ Grade ____

If you have completed a science course put a check by it. If you are currently taking a science course, put CT by it.

Int. Math I	Statistics	Earth & Space	Physics
Int. Math I H	AP Statistics	Biology	AP Physics 1
Int. Math II	AP Calculus AB	AP Biology	AP Physics C
Int. Math II H	AP Calculus BC	Chemistry	AP Comp. Sci. A
Int. Math III	Calculus CD	AP Chemistry	Intro to Eng.
Int. Math III H	Calculus D/Lin	AP Env't Science	Marine Biology
Math Analysis	Discrete Math	Anat. & Phys.	Earth/Space
Pre-Calculus H	Advanced Topics	Intro to Biotech	Other (please list)

Please list ALL previous Science Olympiad events you have participated in and what place you received (feel free to use the back if needed).

I would like to be considered for the following events: Please clearly number up to 8 events by preference from 1 – 8, with 1 being the most desired event. You are not guaranteed your top choices, but we will try our best to accommodate them. *If you or your parent can coach, or if you can recommend us a potential coach, you will receive priority in event assignments.

Anatomy & Phys.	Astronomy	Optics	Electric Vehicle	Experimental Design
Disease Detectives	Dynamic Planet	Wind Power	Helicopters	Game On
Ecology	Remote Sensing	Chemistry Lab	Robot Arm	Hydrogeology
Invasive Species	Rocks & Minerals	Forensics	Towers	Write it Do it
Microbe Mission	Hovercraft	Material Science		

Circle One: I will participate in (3 4) events on the day of the competition.

Additional Notes/Requests on Event Assignments (i.e. I only want building events, I am good at memorization/biology/math etc.):

I have read this packet and understand the rules for student participation in Science Olympiad and I would like to participate in the program and support our Torrey Pines team(s) in the competitions. I accept the responsibility of attending the lunch and coach meetings.

Student Signature: _____ Date: _____

I have read this packet and support and understand the expectations and rules for student participation in Science Olympiad and I commit to supporting my child in the program.

Parent Signature: _____ Date: _____

TORREY PINES SCIENCE OLYMPIAD STUDENT AVAILABILITY SHEET

Student Name _____

Grade _____

Students, please list the times that you WILL NOT be available on the following days. You would list times when you may have swimming practice, karate, music lessons, etc. Please take transportation time into account! We will try our best to accommodate your schedule.

MONDAY	
TUESDAY	
WEDNESDAY	
THURSDAY	
FRIDAY	
SATURDAY	
SUNDAY	

Student Name _____ Grade _____

Torrey Pines Science Olympiad Program Expectations for Parent Support

Due to liability, at least one parent or guardian for each student is expected to assist in some capacity and be present all day on February 18, 2017 from 7 AM to 6 PM at University City HS.

Volunteers make Science Olympiad a success!

 Individual Event Coach: please fill out the coaching form on page 10.		
Parents on Loan (8): help administer tests, set-up, help event captains, etc. at event site (~ 4 hour sh		
T-shirt Coordinator (1): orders and picks up t-shirts		
T-shirt Committee (6): help distribute t-shirts to assigned students on competition day		
Food Coordinator (1): manages food distribution for competition day		
Food Committee (8): purchases and brings food on competition day and includes: coffee runner (1), water hauler (1), breakfast (3), lunch (3). Please specify preferred job:		
Registration (6): distribute wristbands and help make sure all students are checked in.		
Set Up Team (6): Team station set-up of all required materials		
Break Down Team (4): make sure the Torrey Pines area is cleared and cleaned up		
Food Tables (12): man the food tables throughout the competition day (various shifts available)		
Materials to Loan? We always need wagons and tables for competition. If you have any of these materials, please let us know and specify what you will be able to loan us:		

Parent or Guardian Signature _____ Date _____

Parent or Guardian Signature _____ Date _____

*All money spent will be reimbursed. Tasks may be changed based on need.

Emergency Contact Information

Name	
Address	
Relation to Student	
Home TEL () Cell Phone ()	Work TEL ()
Doctor's Name	
Address	
TEL ()	After Hours TEL ()
Allergies	

Student Name

Science Olympiad Organization Code of Ethics

Student participants are expected to compete in tournament events, and with an honest effort to follow the rules and the spirit of the competition. The goal of competition is to give one's best effort while displaying honesty, integrity, and sportsmanship. Students, coaches, parents and guests are expected to display courtesy and respect toward Olympiad officials, other teams, and guests of the Olympiad. Failure to show honesty and/or courtesy by a participant, coach, or guest of the team may result in the disqualification of the team from that event, the entire tournament or future tournaments.

I pledge to put forth my best effort in the Science Olympiad and to uphold the principles of honest competition.		
Student Name (Print)		
Signature	Date	
I pledge to support my child in upholding the Science Olympiad Code of Ethics and to personally uphold the principles contained therein for parents.		
Parent or Guardian Name (Print)		
Signature	Date	

Torrey Pines Science Olympiad Parent or Guardian Permission Form

I give my permission for ______(student's name) to participate in the Torrey Pines Science Olympiad Program.

I understand that I am responsible for all transportation for my child to and from team event meetings, workshops, field trips, and competition(s). I also understand that I am responsible for the cost of materials used in device construction. I agree to be responsible for any damage done, accidentally or purposefully, during preparation for or at the competition in the Science Olympiad Program by my child. If some damages are incurred, I understand that a bill will be sent to me for payment. I give my permission for representatives of the Science Olympiad Program to seek appropriate medical treatment or attention on behalf of my child as may be required by the circumstances, including but not limited to medical doctor and/or hospital visits and the power to authorize medical treatment or medical procedures in an emergency situation. I agree that I have financial responsibility for any necessary medical treatment or attention for my child. I understand that this program is sponsored by the Torrey Pines Foundation and supported entirely through volunteer efforts. I understand that rules have been established for student behavior during preparation for and at the competition during the Science Olympiad Program. I understand that I am responsible for my child at all times during the program. If I am not personally in attendance, I understand that all reasonable and appropriate measures will be taken to ensure the safety and welfare of my child and I agree to not hold representatives of or volunteers for the Science Olympiad Program liable. I AGREE TO BE IN ATTENDANCE THE ENTIRE DAY OF THE COMPETITION WITH MY CHILD.

Torrey Pines Science Olympiad DOES DOES NOT have my permission to use my child's **name and/ or picture on the website, in local mass media or publicity releases.**

I have read the entire packet and agree with the program requirements.

Parent or Guardian Name (Print)

Signature

Coach Application Form

Qualified coaches make a difference! If you are experienced in any fields that relate to this year's events or have any interest in coaching an event, please fill out this form OR if you know another adult who can coach, please give us some of their contact information!

Students may also coach an event, but this form is to be filled out by the student's parents AND an adult must be present with the student at the event meetings

Circle one:	Student	Parent
	Sludeni	I alem

Event Name(s):

Name:

Email:

__ Home Phone:

__ Cell Phone:

*Please check preferred method of contact

3 time slots that I am able to coach

1. Day of the Week:

Time(s):

2. Day of the Week:

Time(s):

3. Day of the Week:

Time(s):