# TMS SCIENCE OLYMPIAD CLUB CHARTER 

```2021-22
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MAY 22, 2021
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## Document Revision History

This document will be updated throughout the year as and when new circumstances arise and decisions are made.

| Revision No. | Revised On | Description | Approved By |
| :---: | :---: | :---: | :---: |
| 1.0 | $5 / 22 / 2021$ | SO Charter Definition | Ms. Wondercheck |
| 2.0 | $6 / 16 / 2021$ | Updated Coaches for a few teams | Ms. Wondercheck |
| 3.0 | $8 / 30 / 2021$ | Updated coaches info | Ms. Wondercheck |
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## TMS Science Olympiad Club Information

* Name of Club: TMS Science Olympiad (SO) Club
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* Program Coordinator Team:
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## TMS Science Olympiad Club Mission

The TMS Science Olympiad program's mission is to help students develop a love for science and advance their learnings to achieve success at Science Olympiad Regional, State and National competition levels by
$\checkmark$ Engaging students in a rigorous learning experience of science topics and encouraging them to perform their best.
$\checkmark$ Encouraging teamwork, sportsmanship, respect, and responsibility.
$\checkmark$ Promoting peer growth and school spirit.
$\checkmark$ Building $21^{\text {st }}$ century skills while developing character, citizenship, and community.
$\checkmark$ Follow Timberline values and the PACK Way.

## What is Science Olympiad

Science Olympiad competitions are like academic track meets, consisting of a series of 23 team events in Division B for middle school. Each year, a portion of the events are rotated to reflect the ever-changing nature of genetics, earth science, chemistry, anatomy, physics, geology, mechanical engineering, and technology. By combining events from all disciplines, Science Olympiad encourages a wide cross-section of students to get involved. Emphasis is placed on active, hands-on group participation. Through Science Olympiad, students, teachers, parents, principals, and business leaders bond together and work toward a shared goal.

Teamwork and collaboration is a required skill in most scientific careers in the $21^{\text {st }}$ century today, and Science Olympiad encourages group learning by designing events that forge alliances. In Elevated Bridge, an engineering whiz and a kid from a wood shop can become gold medalists. Similarly, a talented builder and a student with a good science vocabulary can excel in Write It Do It.

The culmination of nearly 300 Regional and State tournaments (and about 100 practice Invitationals!) is the Science Olympiad National Tournament, held at a different university each year. This rotating system gives students the opportunity to visit new parts of the country and tour colleges they might consider for their undergraduate studies and provides a memorable experience that lasts a lifetime.
Taken from: https://www.soinc.org/info/about-science-olympiad

## Team Composition

## Team Members

A Science Olympiad team consists of up to 15 students collectively studying for 23 events. A team may have alternates, but only a maximum of 15 students may compete in the scoring events on tournament day. Alternates may compete in any trial events offered at tournaments.

At TMS, each team will have 15. If any team advances to state/national competition, alternates will be determined from other school teams.

The goal of each team should be to rank as high as possible across all 23 events to increase their chances of advancing to State. Each team must have 2 team coaches and several event coaches to help students prepare for the invitational \& Regional competitions.

Read the Roles and Responsibilities section to learn more about Student responsibilities.

## Team Coaches

Each team must have 2 coaches. Team coaches identify event coaches from among the parents of their team participants.

Read the Roles and Responsibilities section to learn more about the Team Coach's responsibilities.

## Event Coaches

There are 23 events each year. Parents of the students of a team are expected to take on the role of Event coaches for one or more topics. An event coach will be assigned for each event. It is the responsibility of the event coaches to ensure students are on track with preparations for their respective events.

Read the Roles and Responsibilities section to learn more about the Event Coach's responsibilities.

## How many SO teams at TMS

WA SO allows a maximum of 6 teams per school to participate at the Regional Tournament (rules subject to change). TMS will have one Varsity Team (Alpha- the top team with 8th and $7^{\text {th }}$ grader top performers) and up to 3 Junior Varsity ( JV ) Teams (Beta- returning 8th grader team, Gamma- returning 7th grader team, Delta- another returning 7th grader team) and two new teams (Epsilon and Zeta mostly with 6th graders). These teams may not be entirely divided by grades and could have a mix of grades to allow flexibility. Year after year, students can progress from Epsilon, Zeta to Gamma, Delta teams based on students' performances, coachability, ability to collaborate with different individuals, and dedication to the club and or events. Using that information, students can be promoted to either the varsity team Alpha or to the other $8^{\text {th }}$ grader team Beta.

Some invitationals limit the number of teams per school to participate. In this situation, the varsity team will have the priority to attend all invitationals if they choose to and the remaining opportunities will be equally distributed among the JV team and the new teams.

All teams must participate in the Regional competition and earn their own qualification to State (and national) competition. WA SO allows a maximum of two teams from each school to advance to State. National SO allows only one team from the school to advance to the Nationals tournament.

## How to join a TMS SO Team

Any 6th - 8th grader student can sign-up for the TMS Science Olympiad Club, paying dues of $\$ 100.00$ per student (this amount is subject to change) and filling in the enrollment form at the school website.

Since only 6 teams of 15 students are allowed per school, TMS can only allow 90 students to participate in the SO program. Returning students will be given preference to sign-up first in late Spring, then remaining spots will be filled only in the fall from new registrations on a first come first serve basis for most part. Others will be waitlisted. To keep the program sustainable, at least one new $6^{\text {th }}$ grade team will be formed during the fall.

New members and new teams start each fall allowing for an equitable invitation to the program. We are unable to allow new students and new teams to form in the summer.

## Team Selections

TMS will have one Varsity team and up to five Junior Varsity (JV) teams and new teams combined. The end of the season survey plays a critical role in determining interest among returning students to continue with the SO program. If a survey response is not received for a returning student before the deadline, it will be assumed that the student is not interested in returning to the SO program and he/she/they will not be considered for a spot on the Varsity/JV teams being formed in the summer before the new season.

The varsity team will be formed in the summer prior to the start of the new season. If there are enough students returning, more JV teams will also be formed as a full team or partial team (additional members to be added in the fall) at the same time. Newer teams will be formed in the fall after school begins in session. Once these teams are formed in full capacity, we expect very little changes to these teams during the season.

## Varsity Team Selection

The TMS varsity Alpha team will be seen as the top school team to advance to State and National tournaments. Majority of the participants from the top performing $7^{\text {th }}$ grader team(s) in the prior season will form the Varsity Team for the following year. However, this does not guarantee a spot for every returning member in that team. Exceptional incoming 8th grade and 7th grade performers from the other teams in the previous season could be considered for the varsity team. The makeup of the Varsity team is at the varsity team's coaches' discretion with following considerations:

1. Previous SO experience is critical. $8^{\text {th }}$ graders with at least one-year previous experience will be preferred.
2. Past year regional ranks: Students with an exceptional track record in previous year's Regionals will be given preference. 7th grade students with an exceptional track record will also be considered. We review past years performance at Regional and other invitationals and look for consistent performances.
3. Flexibility and work ethic: Students with strong work ethic and flexibility to take on any topic will be preferred. Students joining the varsity team must commit to the rigor and time needed to advance from Regionals to State and then to Nationals.
4. Students who highly exhibit school values, the PACK way on and off campus, and coachability will also be considered to team preference.
5. To reduce impact to returning JV teams, we will limit movement of students from any given team to the varsity team to a maximum of $3(20 \%$ change $)$. Students can decide to decline the offer to move to the varsity team if they want to continue in their current JV team.
6. All student selections to the varsity team need to be backed with reason that can be explained. The varsity team coaches will need to closely work with the faculty advisor in the varsity team selection process.

## JV Team Selections

The makeup of each returning JV team will be decided by the program coordinator team in consultation with the team coaches.

1. Other than to the varsity team, we will try not to move students out to another JV team unless the student requests for a change. Moving between teams is allowed if space permits. Post season survey serves this purpose and accommodations will be made as much as possible.
2. If such requests come up after the post-season survey, they need to be made to tmssocoach@gmail.com.

## New Team Selections

1. Two new teams, Epsilon and Zeta will be formed at the beginning of the school year in the fall based on the new enrollment requests to the program.
2. New team formation decisions will be made by the program coordinators for most part taking into consideration inputs from the new team coaches.

## Back-up students from the waitlist

In the situation where we do not have a full 15 students to form a team, the priority is given to the returning team to have a full 15 students. Students who are unable to be placed into teams, will be waitlisted.

If a vacancy is created on a team, the spot will be filled in this order: Off the waitlisted students 8 th grade students would get the first preference, then 7 th grade students and finally the 6th grade students.
If the vacancy is created on the varsity team, the program coordinators can look for the right replacement from the available waitlist in any order. Student and team preferences will be honored to the extent possible. Student placement decisions will be made by the Program Coordinator team and their decision is final.
NOTE: If a student in any team is unable to attend the Regionals tournament, he/she/they will be removed from the SO program for the remainder of the season.

## Resources and Materials

- WA Science Olympiad Website: https://washingtonscienceolympiad.com/
- National Science Olympiad Resources Website: https://scioly.org/
- National Science Olympiad for everything Science Olympiad: https://www.soinc.org/
- CDs from SO site.
- Division B question papers from past invitationals.
- School buildings availability for practicing building events (ex: Gliders, Battery buggies.)
- External Help: http://www.redmondmathsciencehelp.com/ TMS does not endorse or require attending lab sessions or taking sessions from Aruna for a fee (Subject Matter Expert on Science Olympiad. - outside of school). But including this info anyway to inform parents that such an option may be available, for those who need mentorship.


## How will events be assigned to students?

Every effort will be made for students to be assigned their topics of interest. However, it is not guaranteed. Students must be flexible to pick up topics to get proper coverage for the team. Students are expected to show commitment \& success to all their assigned topics irrespective whether the topic was their preferred topic or not.

For any new members adding to an existing team, please be aware that your event choices could be limited due to

- Students from previous year have been more successful in the event and are already assigned to continue with them or
- New events and topics have been chosen by the National Science Olympiad list of events and these new topics or events will have to be chosen by team members.

2021-22 topics are not known yet. As per the SO website,
https://www.soinc.org/events/2021-division-b-events 2020-21 Division B topics are broadly categorized into:
> Life, Personal \& Social Science
$>$ Earth \& Space Science
> Physical Science \& Chemistry
> Technology \& Engineering
> Inquiry \& Nature of Science

1. When the topics \& block schedules for the new season are published, team coaches must make topic assignments considering student interests, student's prior experience in the topic, workload for the topic and schedule constraints.
2. TMS SO program coordinators recommend that all teams adopt the assignment combinations developed by the varsity team as that will minimize scheduling challenges during the invitationals \& regionals competitions and create multiple back-ups for an unplanned student turnover in the varsity team for State/Nationals after the Regionals.
3. Team coaches are free to deviate from this recommendation at their own risk. If certain invitational/regional tournament organizers are unable to accommodate TMS teams in multiple blocks, the block recommended by the program coordinators will be the official school block in those events.

## Time Commitment Expectations

Time commitment expectations vary from team to team.

- 3 events could mean about a minimum of 8 to 10 hours per week, balanced between weekly event meetings, individual practice, team meetings etc. Varsity teams average about 20 hours per week.
- Several students that participate in SO also participate in Robotics and other extra-curricular activities. We do not discourage students from participating in other activities, but we do require students to prioritize Science Olympiad in the event of schedule conflicts with other events.
- Students on the Varsity team must prioritize SO over other extra-curricular activities and dedicate maximum time. Not doing so may risk their position on the varsity team.
- Build events do require a substantial amount of time more than study events and this should be taken into consideration as well when choosing events. Students have to build and make many prototypes with various practices throughout the year.


## Science Olympiad competition Questions

## 1) What are the steps for Science Olympiad Competitions?

Science Olympiad competition involves the following steps: Register student for TMS SOC ---> Form Teams ---> Register Teams in SO website (by Coordinator/Advisor) ---> Attend Invitationals (optional / recommended) ---> Attend Regionals Tournament (mandatory) ---> Advance to State Tournament ---> 1 Team advances to Nationals Tournament.

## 2) How are teams scored at competitions?

Team with the lowest cumulative score across all events wins.

## 3) How is it determined what teams advance to state?

Number of Teams advancing to State is determined based on calculation documented in the WA Science Olympiad Website. Off the top performing teams per regional tournament, no more than 2 teams per school can advance to State. Number of teams advancing to state also depends on the number of teams participating at that regional qualifying tournament location.

## 4) When do the SO competitions take place?

In general, the teams compete on Saturdays a few times between December and March; April if teams make it to state, and May if the team makes it to Nationals. Exact dates change from year to year.

## 5) How many events should a student do at a competition?

More than 1 but less than 4 for the most part. Doing only 1 event forces your teammates to do more events to compensate. Doing more events also means you have to prepare for more and so you may not do so well. Exact number of events is dependent on the number of team members and particular events. (Build events do take A LOT of time!)

## 6) How long are the competitions?

Competition days can be quite long. Most starting from 7:30 am to 6:00 pm. Events end at 3:00 pm, with a long break for scoring of tests and team points team, followed by an awards ceremony if the competition is held in person. If the competition is held online, the tests run from 7:00 am to $3: 00 \mathrm{pm}$ and results are published a week later. Snacks and food are important for students to maintain energy. It is better to have parents run and get these items, have them delivered, or bring them to competitions. It is not feasible for students to leave the campus to go get things as they could miss their event.

## 7) What do we do if we feel something was done incorrectly or done unfairly at a competition?

Mistakes can happen as most people volunteer their time to host and help with events. Please contact the coach of your team first and foremost. Your coach will then inform the head coaches and advisor of the situation. One of them will act as the liaison to talk to event coordinators. Please do not approach event volunteers or coordinators with circumstances as it could lead to a team disqualification.

## Roles and Responsibilities

## Role of the Head Coach

- Create the TMS SO Program Charter and govern the program as per the charter.
- Serve as a liaison between coaches, faculty advisor, WA State Science Olympiad and Tournament Directors.
- Ensure the SO program is sustainable and always act in the interest of the school.
- Create enrollment forms and collect funds to be used for the rest of the school year. Forecast funds needed (year-end gifts, team registration, Basic SO Materials)
- Register the school for SO at the beginning of the year. Facilitate Choice of Regional Tournament Location based on school calendar / and activity calendar.
- Procure Materials early in the school year, preferably during summer and download so that it can be available and shared across all teams.
- Maintain SO student contact list and Team list directory for sharing communications and to build team rosters for Olympiad tournaments.
- Maintain a list of waitlisted students and oversee their assignment to teams in a transparent manner.
- Ensure that all SO members follow the registration process and are members of the club. Membership is obtained by paying dues. Membership is required to participate.
- Share invitational test papers with all teams ensuring that the teams that did not get a chance to attend certain invitationals get access to the test papers for practice.
- Save the ranks/ raw scores and performance data in invitationals and regionals will be helpful while forming a varsity team next year.
- Be transparent about the invitationals available and provide equity to all teams to compete fairly and at their best.
- Maintain a calendar of schedules and important dates for SO and all other extra-curricular activities to call out conflicts. Namely, NHD, Math Competitions, Science Bowl, YBTC, SO dates and Robotic Event
- Alert the stakeholders about any conflicts with the SO calendar at the earliest available time and look for options.
- Coordinate Block Schedules across participating teams. Block schedules are events that require all the teams in a school to participate together, at the same time. Not following this rule leads to disqualification.
- Hold Coaches meetings as necessary to accomplish tasks. Document important decisions for future reference.
- Help teams and Coaches through event assignments and help them schedule.
- Communicate/pass on communication from WA State Director / Tournament to all Coaches and school Advisor.
- Help with conflict management across all teams.
- Ensure that the school rules are documented, and the charter document is updated with new information \& decisions as and when they happen.
- Work with Coaches/School to establish guidelines for Invitational participation.
- Register for invitationals based on discussions with coaches.
- Schedule blocks (if needed) 2 weeks before the tournament.


## Role of the Team Coach

- Read and abide by the Coaches behavior policy set forth by WA SO. Not doing so can risk the school being put on probation for several years.
- Ensure the SO Club charter document is read and understood by every student and parent on your team.
- Ensure the students and parents have read the SO ethics and rules expectations and agree to follow them. Read them out to students and parents if possible.
- Attend all coaches' meetings and take note of developments discussed in the meetings.
- Assign events to students ensuring no schedule conflicts, collaborate with head coaches for block schedules.
- Ensure invitational and regional dates work for everyone on the team and that there is full participation on these events.
- Encourage students to take practice tests/invitationals. Share question papers and materials with students whenever needed.
- Monitor progress of all events and resolve conflicts within teams. Ensure that all members are active and participating satisfactorily.
- Help with brainstorming solutions for build events.
- Resolve conflicts within the team. Escalate issues to the program coordinators as needed.
- Defer communications with external tournament organizers to head coaches. Do not interact with the tournament organizers directly unless the head coaches ask you to do so.
- If you must interact with tournament organizers, maintain professional communications with them. Be polite and follow the protocols \& guidelines put forth by the program coordinators while interacting with organizers of invitational, regional/state/national competitions.
- Proactively communicate invitational schedules, rules modifications, due dates for submissions and other important information to the team.
- Must inform the SO Program coordinators if a student drops out. Work with coordinators to back fill the spot.
- Take team Pictures and share medals information for PTSA and school communications to the school advisor.
- Build a positive team morale. Keep SO student families apprised of challenges and accomplishments. Encourage Students to follow up with each other to keep student members honest.
- Regularly sync with their event coaches to ensure students are making progress and that they are receiving the necessary support from their partners and event coaches. Have a conversation with student families who are not participating and create a plan.
- SO program is a volunteer run program. As team coaches it is important that you attend all coaches' meetings and stay on top of all the information coming your way and relay it successfully to your teams. Your team's success and TMS SO program's success depends on you. If you are unable to commit time to team coach responsibilities, identify another parent from your team who can take over as the team coach- this will keep the SO experience a pleasant one for your team and for the program coordinators \& other team coaches.
- If you are coach for a JV team, encourage your students to perform well throughout the year so that they get a chance to move into the varsity team next year. As team coaches, you are custodians of talent (not owners of talent). If one or more students from your team are selected for the varsity team, support their transition to the varsity team and be open to work with new students assigned in their place.
- Follow all school values, policies, code of conduct, and participate in the PACK WAY.
- Contact the chain of command and talk to the head coach or advisor if any problem arises.

There are additional responsibilities to be carried out by the team coaches for invitationals and tournaments.

- Invitational Signups: Work with the head coaches to sign up for invitationals.
- Collaborate with SO head coaches for Block Schedule Sign up prior to every invitational and tournament.
- Be always polite and professional to Regional coordinators and Tournament directors, under any circumstance. DO NOT do anything to jeopardize the continuity of the program for future years for the school.
- Work with Tournament Director/regional organizers through head coaches as much as possible. If you must directly communicate with them when resolving issues with the tournament/invitational director, keep the head coaches in the loop and be professional in your interactions.
- Register and handle disputes during the Tournament.
- Educate Team parents and students on code of conduct during Invitationals and Tournaments. Students and parents cannot interact with invitational/regional/state directors and organizers directly. All communications on behalf of the student and parent need to be handled by the team coach.
- Educate Team parents and students that they cannot interact with members of other TMS teams during invitationals.
- Educate team students and parents that they are not allowed to comment on, or take pictures of the build items of other teams in in-person tournaments.
- Coordinate Team Snacks during Tournaments (Optional)


## Role of the Event Coach

- Ensure that the students have the necessary study/build materials to be successful in that event.
- Ensure that students understand all event specific rules.
- Needs to ensure that students submit the necessary build related documents before the due date.
- Ensure that students are preparing for the event and are making progress.
- Follow school values, policies, code of conduct, and the PACK Way.
- Follow the chain of command for help or support. Contact coach first and foremost.


## Role of the Student

- Prepare well for the event. Read the syllabus provided by SO for your event.
- Attend all invitationals \& tournaments and perform your best.
- Take practice tests regularly. Work on Build events and labs. Ensure events are supported with sufficient practice.
- Follow up on progress with teammates. If your partner is not making enough effort, bring that to your team coach's attention.
- Be flexible to unavoidable/unforeseen changes to support your team in the best possible manner.
- Stay committed and prioritize SO over other conflicting activities and make sure you maintain the highest caliber of effort on the team provided. Team assignments can be adjusted based on lack of commitment.
- Always follow the chain of command and share your questions/concerns with your team coaches first and allow them to work with the TMS SO head coaches and advisor to resolve matters.
- Accept and value your outcome at tournaments with pride and satisfaction. Tournaments are provided only by many volunteers and appreciate your placement as an opportunity to grow and develop.
- Follow school values, policies, code of conduct, and the PACK Way.


## Role of the Parent of a student

- SO takes management and coordination. Parent participation is required.
- Participate in team meetings arranged by your team coach.
- Serve as coach for the events students are participating in.
- Procure materials for building (from shops, or websites) to support events.
- Provide raw materials (like binder, stationary) for students to maintain all their notes in a binder.
- Provide study materials. Provide students access to printer, computer and monitored internet access.
- Maintain a schedule of invitationals and Tournament dates and ensure no conflicts occur with the family calendar. If conflict occurs, inform the coach, event partner, and their families right away.
- Help students take practice tests to enhance learning and allow them opportunities to advance their own learning while being able to guide themselves in the process.
- Note that at the time of SO Registration, Tournament site dates and Invitational dates are unknown. Families need to be flexible to accommodate SO Schedule and inform team coaches if they can't make it to Regionals as soon as possible.
- Accept and value your student's outcome at tournaments with pride and satisfaction. Tournaments are provided only by many volunteers and appreciate your placement as an opportunity to grow and develop.
- Follow school values, policies, code of conduct, and the PACK Way.


## Team Finances

School does not bear any cost for Science Olympiad tournaments. Science Olympiad can be expensive due to travel and the events chosen by your student. Usually, costs are shared among team members. Normal costs include:

- Hotels + Gas to be paid by individual families.
o $\approx \$ 120$ for Camas, WA, or any other WA/OR based Tournaments.
o $\approx \$ 150$ for State Tournament (if we qualify, and depends on location)
- Build/lab events
o $\approx \$ 50-250$ (depends on build and level of construction)
Expenses are shared by all team members because all materials are considered team / TMS property. Keep in mind that some events cost significantly less than others. Building prototypes and events usually take up more of a team's budget. Teams are encouraged to start with a contribution about $\$ 100$ initially to offset team expenses.

