San Ramon Valley Science Olympiad 2023 - 2024



What is Science Olympiad?

- Science Olympiad is a large team event designed to explore the scientific field of education.
- Elementary Science Olympiad combines both knowledge based science and hands-on science in a competition format.
- Multiple teams will be broken up to work on their specific events.
- The events will surround scientific processes, knowledge, and application.



Our Team

Board of Directors: Alagu Subramanian

Executive Sector: Sundar Subramanian, Nikitha Bangalore, Arush Jain, Ansh Gandhi

Build Events Committee: Auron Bhattacharya, Vedanth Dala, Neha Subramani

Theory Events Committee: Megha Guntuku, Sanjana Rao, Supreetha Jammalamadaka

Instant Challenge Committee: Caden Chang, Chhavi Bidhuri

2022-2023 SRVSO Teams - 48 total

Bella Vista: 3

Bollinger Canyon: 5

Country Club: 3

Coyote Creek: 5

Creekside: 1

Golden View: 1

Greenbrook: 1

Hidden Hills: 4

Live Oak: 6

Montevideo: 5

Neil Armstrong: 1

Quail Run: 6

Sycamore Valley: 1

Twin Creeks: 3

Vista Grande: 2

Walt Disney: 1

Why you should join Science Olympiad!

- Science Olympiad rewards students with vital life skills like organization,
 leadership, confidence, teamwork and much more.
- Science Olympiad prepares the young generation for success in future years of middle school, high school, and beyond.
- Work as a team to be rewarded for the pursuit in scientific achievement.
- Learn science in a fun and creative way
- Learn to operate in a competitive environment
- Become self-motivated and inspired to explore various fields of science









How Can I Join the SRVSO Family?

- 1. Attend one information session.
- 2. Form a team of 6 students from the same school. (4th and 5th graders).
- 3. Choose a team Coach.
- 4. Register for the Olympiad (team/participant fee).
- 5. Prepare for your events.
- 6. Have fun!

Competition Format

Elementary Science Olympiad consists of 7 events:

- 3 Theory Events (2 members per event)
- 3 Build Events (2 member per event)
- 1 Instant Challenge (All 6 members will participate)

Competition Date: Will take place during a weekend in mid-late March (TBA).

Theory Events

- Theory events can be thought of as a test of knowledge in a specific subject.
- Teams prepare for the event by studying the content for months prior to competition day.
- Theory events also test critical-thinking skills relevant to the given subject.

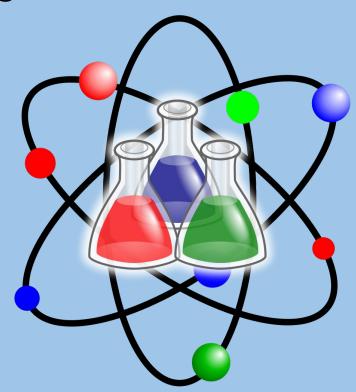


2023-2024 Theory Events

Cell Factory

Down To Earth

Math Whiz



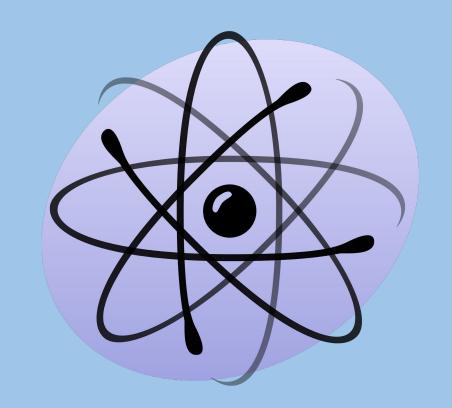
Theory Event: Cell Factory

Students will be asked various questions about cells. They will be tested on organelles, membranes, molecule transport, surface area vs volume ratios, osmosis (hypotonic, isotonic, and hypertonic solutions), and the differences between eukaryotic vs prokaryotic cells.



Theory Event: Down To Earth

Students will be tested on their ability to solve and identify aspects of (1-dimensional) kinematics and problems involving Newton's laws of motion. This will be tested both algebraically and theoretically.



Theory Event: Math Whiz

Students will be tested on simplifying algebraic expressions and their ability to correctly interpret and analyze graphs in the context of a problem. They will also be tested on probability and proportional relationships.

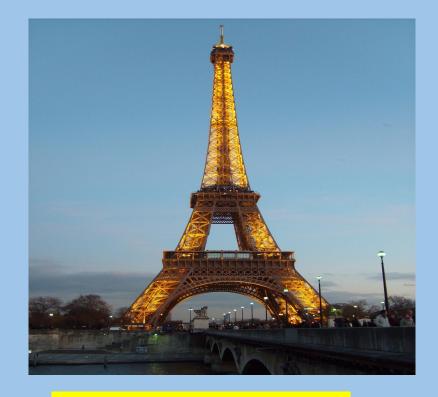


Build Events

Students will build contraptions and objects under guidelines to serve specific purposes. (Impound rules included).

Teams will prepare for the event by building prototypes and tweaking the project to create the best performing final product

The final product is then tested under the guidelines in front of a judge.



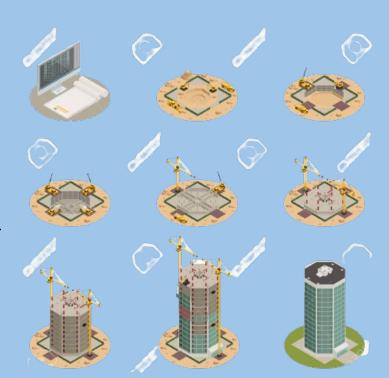
Teams will be required to document their project in the form of a <u>build binder</u> this year.

2023-2024 Build Events

Toothpick Bridge

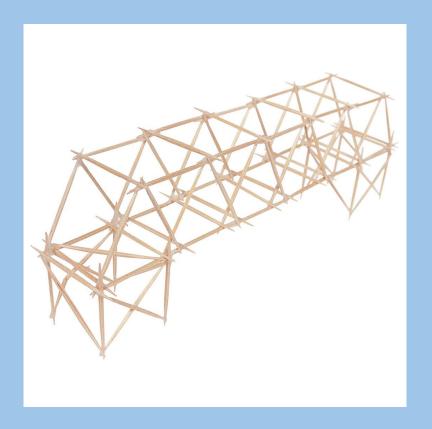
Paddle Boat Construction

Battery Buggy



Build Event: Toothpick Bridge

Prior to the event, participants will create a bridge made entirely of toothpicks. The bridge will be judged by how much weight it can hold before collapsing.



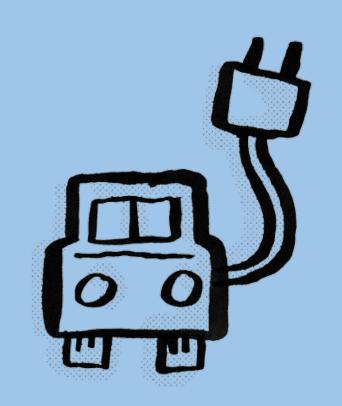
Build Event: Paddle Boat Construction

Prior to the event, participants will build a paddle boat that is propelled mainly by two rubber bands. The boat must fit within a box of specified size. Afterwards, it will be placed in a tub of water and scored on distance it can travel.



Build Event: Battery Buggy

Participants will design, build, and test a vehicle that uses electrical energy as its sole mean of force prior to the event date. The goal is for the contraption to travel a certain distance, as close as possible to a specified target.



Instant Challenge

The instant challenge is a rapid-fire event in which teams must brainstorm ideas for completing their given task under a very strict time limit. After only a few minutes, they must present their idea to a judging panel! The team's solution to the task and their presentation will both be graded based on various criteria. The instant challenge details will be released on the day of the olympiad.

Registration: Next Steps

- 1. Form a team of 6 students (4th and 5th graders from the same school).
- 2. Select a team parent to be the coach.
- 3. Coach will pay a teamwide fee of \$150.
- 4. Coach must fill in a REGISTRATION google form (will be uploaded on the website & emailed to all attendees) with the following info:
 - Names of 6 students
 - Grade level of 6 students
 - School Name
 - Coach Name, Email, and Phone Number
 - Payment Confirmation
- 5. Coach will receive confirmation email (3-5 days after submitting).

Registration Opens:

3rd week of Oct.

SIGN UP AS SOON AS POSSIBLE

Deadline To Register:

November 5th, 2023

11:59 PM

Team Formation Advice

- Reach out to your students' peers/other friends at your school to see if they are interested in participating
 - Fourth and Fifth graders participate in the Science Olympiad!
- Fill out the SRVSO Information Release form
 - Sent out through email after tonight's meeting
 - If filled out, your contact information will be added to a viewable google sheet where you can find others looking for a team, and they can find you!

Event Day

Tentative Event Day Near Mid- to Late-March

SCAN ME TO
ACCESS TODAY'S
SLIDESHOW (or
type link below)

https://tinyurl.com/ srvsoInfoNight24



Any Questions?

Contact us:

srvs02020@gmail.com

srvso.org