What is Science Olympiad?

International nonprofit organization dedicated to:

• Improving the quality of science education

• Increasing student interest in science and science careers.

• Achieved by participating in a competition at the Regional, State and National level.

23 Events, Division B (Grades 6-8)

Virginia Science Olympiad Events List

5 Branches of Science
- Life, Personal & Social Science
- Earth & Space Science
- Physical Science & Chemistry
- Technology & Engineering
- Inquiry & Nature of Science
2017-2018 Division B Events (www.virginiaso.com)

LIFE, PERSONAL & SOCIAL SCIENCE
- Anatomy & Physiology (Test)
- Disease Detectives *States Only* (Test)
- Water Quality (Test)
- Herpetology (Test)
- Heredity (Lab)

EARTH & SPACE SCIENCE
- Dynamic Planet (Test)
- Meteorology (Test)
- Solar System (Test)
- Road Scholar (Hands-on)
- Fossils (Test)

INQUIRY & NATURE OF SCIENCE
- Experimental Design (Hands-on)
- Game Onts (Lab)
- Write it, Do It (Hands-on)
- Mystery Architecture (Lab)

PHYSICAL SCIENCE & CHEMISTRY
- Crime Busters *States only* (lab)
- Potions & Poisons (Lab)
- Density Lab (Build)
- Shock Value (Test)
- Thermodynamics (Build)

TECHNOLOGY & ENGINEERING
- Roller Coaster (Build)
- Battery Buggy (Build)
- Boomilever (Build)
- Elastic Launch Glider (Build)
## 2016-17 VASO Event Table

### 2019 VASO Event Conflicts

<table>
<thead>
<tr>
<th>Session A</th>
<th>Session B</th>
<th>Session C</th>
<th>Session D</th>
<th>Session E</th>
<th>Session F</th>
<th>Self</th>
<th>Scheduled</th>
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<tbody>
<tr>
<td>Meteorology</td>
<td>Crime Busters</td>
<td>Anatomy &amp; Phys.</td>
<td>Circuit Lab</td>
<td>Codebusters (sub)</td>
<td>Dynamic Planet</td>
<td>Battery Buggy</td>
<td>Boomilever</td>
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<td>Disease Detectives</td>
<td>Potions &amp; Poisons</td>
<td>Density Lab</td>
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<td>Heredity</td>
<td>Glider (States)</td>
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<td>Write It, Do It</td>
<td>Exp Design (States only)</td>
<td>Road Scholar</td>
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### Notes:

- This does not indicate exactly when in the day each session will occur. However, it does tell you the event conflict.
- The events in a single session will all be held at the same time, so a student may only be in one event in a session.
- For example, in Division B, someone in Thermo cannot be in Write It, Do It because they are both in Session D.
- Coaches will schedule students in the "self-schedule" events in a session of their choosing.
- The specific schedule with times will be available for each tournament by the end of December.
<table>
<thead>
<tr>
<th>Time</th>
<th>Impound Devices 8:00-9:00</th>
<th>Events</th>
<th>Room</th>
<th>Session 1 (9:10-10:05)</th>
<th>Session 2 (10:15-11:10)</th>
<th>Lunch Break 11:10-11:40</th>
<th>Session 3 (11:40-12:35)</th>
<th>Session 4 (12:45-1:40)</th>
<th>Session 5 (1:50-2:45)</th>
<th>Session 6 (2:55-3:50)</th>
<th>Session 7 (4:00-4:30)</th>
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Types of Events

1. Testing Events
   - Take a test on the subject they have been assigned
   - "Cheat" sheet

2. Engineering/Building Events

3. Lab Events
   - Anatomy & Physiology
   - Herpetology
   - Water Quality
   - Elastic Launch Glider
     (build glider capable of maximum time aloft)
   - Boomilever
     (build lightest bridge with highest structural efficiency)
   - Crime Busters (forensics)
   - Chem Lab (analyze products)

www.virginaso.com
What will you be doing?

**Processing Skills:** Build a solid foundation of knowledge by gathering information
- Observation
- Classification
- Measurement

**Reasoning Skills:** Develop new knowledge by making sense of the information through a data-based approach to understanding the world
- Prediction
- Testing
- Assessment

**Critical Thinking Skills:** Make use of new knowledge in solving problems by identifying and analysing rather than intuition or instinct.
- Inference
- Communication
Commitment
Parents & Students

Maximum of 15 students/team

Parent-led:
• Parents are required to lead 1 or 2 events for a student to be on the team.
• Parents do not need to be knowledgeable in the event; make sure students know rules, guide them in research on-line, structure preparation...

Student Time Commitment:
• Students are required to participate in 3-4 events.
• Approximately 1 1/2 hours/week/event (longer sessions for engineering events); may meet 2x/week leading up to a tournament.
Coaching Responsibilities

Be the main resource for the students
- Permitted event reference materials at competition
- Make sure the students KNOW the rules!
- Stay on top of rule changes and clarifications (virginiaso.com & soinc.org)

Resources/Study materials
- Event manual
- Science Olympiad websites
- Other research materials

Help the students “own” their events
- Set goals or tasks to be accomplished before next meeting
- Make students accountable for researching, give a specific topic to work on before the next meeting

Frequency of practices

Types of practices necessary for event
“All events are not created equally”
*Study Events
- Group, Lab, E-mail, On-line
- Binders, reference materials, “cheat” sheet
*Building Events
- Construction sessions, Practice sessions
- Construction and practice locations
- Safety and Liability
Competition Dates
2018-2019

Building Event Informational (optional)
TBD@Longfellow MS

Regionals
Jan 26, 2019 @ Charlottesville High School, Charlottesville VA

States
Mar 23, 2019 @ UVA, Charlottesville VA

Nationals
May 31 – Jun 1@ Cornell University, Ithaca NY
COST

Team cost:
• $300 registration/team
• Rules manual
• Team T-shirts
• Regional Competition Lunch (Pizza, cookies & drinks)
• **Total registration cost per member $75**

Individual cost per event:
• Teaching CD’s/book for more information
  $16.00/2 team members = **$8.00**
• Building/Lab materials **$15-$60/ team member**
• Ward’s Science for building/lab materials: [www.wardsci.com](http://www.wardsci.com)
• Teaching/Coaches Manual: $16/2 members = **$8.00** [http://store.soinc.org/c-21-materials-for-2016-competitions.aspx](http://store.soinc.org/c-21-materials-for-2016-competitions.aspx)
• Quizlet
• Scioly: [www.scioly.org](http://www.scioly.org)
What to do next...

• Go to www.virginiaso.com and read about the different events offered.

• Choose your top 6 choices

• Submit your form by Friday, October 5
• You will find the form link on HPMS website

• Teams will be formed by: Sunday, October 7th

• Come to the first SO meeting on Oct 10th @ 7:30pm: get assignments, meet partners, coaches, sign contracts & pick up paperwork

Please email Rohini if you have any questions at so.harperpark@gmail.com
Achievements 2014-15

Air Trajectory (4th)
• Sydney Meyer
• Vivian Chen

Dynamic Planet (6th)
• Muskaan Mohal
• Sean Cheng

Entomology (4th)
• Sydney Meyer
• Vivian Chen

Elastic Launch Glider (1st)
• Ethan Kim
• Matthew Newcomer

Green Generation (4th)
• Kunal Kagalwala
• Andrew Ho
Achievements 2015-16

Air Trajectory (4th, Team Maroon)
• Zachary Ho
• Anusha Panvalkar

Anatomy & Physiology (4th, Team Maroon)
• Ethan Kim
• Trisha Maheshwari

Crave the Wave (5th, Team Maroon)
• Maanya Shankar
• Marc Rosenthal

Crime Busters (2nd, Team Maroon)
• Saurav Banerjee
• Ethan Kim

Dynamic Planet (4th, Team Maroon)
• Arushi Garg
• Shahley Nagra

Elastic Launched Glider (2nd, Team Maroon)
• Ethan Kim
• Matthew Newcomer

Green Generation (1st, Team Maroon)
• Matthew Newcomer
• Maanya Shanker

Picture This (2nd, Team Maroon)
• Kunal Kagalwala
• Zachary Ho

Reach for the Stars (5th, Team Maroon)
• Kunal Kagalwala
• Nick Leone

Road Scholar (2nd, Team Maroon)
• Marc Rosenthal
• Maanya Shanker

Scrambler (4th, Team Maroon)
• Nick Leone
• Saurav Banerjee

Write it, Do It (1st, Team Grey)
• Aidan Carraretto
• Nikhil Kamath

Write it, Do it (2nd, Team Maroon)
• Trisha Maheshwari
• Ethan Kim

Experimental Design (3rd, Team Maroon)
• Matthew Newcomer
• Nick Leone
• Kunal Bahl

Fossils (3rd, Team Grey)
• Nikhil Kamath
• Arteom Avvestissian

Fossils (3rd, Team Grey)
• Tiffany Widjaja
• Saurav Banerjee
Achievements 2016-17

**State Result:**

**8th place**
Scrambler: - Zachary Ho & Tiffany Widjaja

Meteorology: - Kyle Pepin & Kaitlyn Close

**9th place**
Reach for the star: - Paula Hung & Tiffany Widjaja

**Regional Result:**

**2nd place**
Meteorology.
Scrambler.
Reach for the star.

**4th place**
Ecology.
Fast Facts.
Rocks & Minerals.
Road Scholar.

**5th place**
Mission Possible.
Wright Stuff.

**6th place**
Wind Power.
WIDI.

- Kyle Pepin & Kaitlyn Close
- Zachary Ho & Tiffany Widjaja
- Matthew Kaupin & Paula Hung
- Tiffany Widjaja & Saahil Mohal
- Zachary Ho & Nikhil Kamath
- Arushi Garg & Namita Shashidhar
- Matthew Kaupin & Yuvraj Sidhu
- Matthew Kaupin & Kyle Pepin
- Paula Hung & Sarah Chang
- Kaitlyn Close & Kyle Pepin
- Paula Hung & Emaan Arif
Achievements 2017-18

Regional Result:

Herpetology - 1st place.
Manohar Nookala
Aadhitya Ramesh

Mystery Architecture - 5th place
Zachary Ho
Christina Hung

Dynamic Planets - 5th place
Sriman Narayana Meduri
Manohar Nookala

Wright Stuff - 5th place
Sriman Narayana Meduri
Eeshwar Chalasani

Roller Coaster - 6th place
Manohar Nookala
Jaise Sanjith
Science Olympiad 2018-2019

Team Member Interest Form

* Required

1. Student's Name *

2. Student's Grade *
   Mark only one oval.
   - 6th Grade
   - 7th Grade
   - 8th Grade

3. Parent's Name *

4. Parent's Email *

5. Parent's Cell Phone Number *

Events Selection:

You can read more about each event at: https://www.sooinc.org/learn/b-event-short-descriptions and https://virginiaso.org/events.php

Please select at least 1 event in each group.

6. Session A *
   Check all that apply:
   - Meteorology (Test)
   - Water Quality (Build)
   - Write It Do It (Lab)

7. Session B *
   Check all that apply:
   - Crime Busters (Lab)
   - Experimental Design (Lab) - STATES ONLY
   - Disease Detectives (Lab)
   - Herpetology (Test)

8. Session C *
   Check all that apply:
   - Anatomy & Physiology (Test)
   - Potions & Poisons (Lab)
   - Road Scholar (Lab)

9. Session D *
   Check all that apply:
   - Circuit Lab (Lab)
   - Density Lab (Lab)
   - Fossils (Lab)

10. Session E *
    Check all that apply:
    - CodeBusters (Test)
    - Mystery Architectural (lab)
    - Solar System (Test)

11. Session F *
    Check all that apply:
    - Dynamic Planet (Test)
    - Heredity (Test)
    - Thermodynamics (Build)

12. Self-Scheduled *
    Check all that apply:
    - Battery Buggy (Build)
    - Roller Coaster (Build)
    - Boomer (Build)
    - Elastic Glider (Build) - STATE ONLY
19. Parent's Choice of Coaching (Your willingness to coach the event will increase the chance that your child is in the team!) *

*Mark only one oval per row.*

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<tr>
<th>Course</th>
<th>Yes, I will coach!</th>
<th>Possible to coach if needed</th>
<th>Not interested</th>
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Science Olympiad Online Form can be found on Harper Park Middle School website
It is under the “Activities” tab,
Please register your child online!!

**SO Registration**

Any questions, please email Rohini at so.harperpark@gmail.com