Wildcat Summer STEM Camp



A fun, competitive STEM enrichment, experience!

Presented by NVHS Science Olympiad Team/Coaches

Mon-Thurs June 10-13 8 AM – 12PM OR 1PM-5PM Neuqua Valley High School Main Campus

Coaches:

Dr. Fuys, Mrs. Smart NVHS Science Olympiad Coaches

Science Olympiad Team Captains/Members

Cost: \$250-payment due by May 31, 2024

Check made to Wildcat Summer STEM and dropped or mailed to

Neuqua Valley HS c/o Dr. Fuys

**Checks made payable to: Wildcat Summer STEM

Enrollment: Open to students enrolling in 6th, 7th 8th, and 9th grades for the 2023-24 school year. Minimum 20 students. Maximum 48 students. There will be at least one coach/student leader for every 10-12 students. Max of 14 in any room at one time.

Registration: Sign up using the following QR or

Registration link:

https://forms.gle/WYjqB6hpT86aXak27



Mail checks to: Wildcat Summer STEM

Attn: Dr. Fuys 2360 95th Street Naperville, IL 60564

Registration is not complete until payment is received.

No refunds can be made.

What is Science Olympiad?



Science Olympiad is a competitive club that brings science to life, shows how science works, emphasizes teamwork/collaboration, builds research skills, encourages problem-solving, and incorporates experimental design in all aspects of science and engineering.

It is about having fun, making new friends, goal-setting, and putting your scientific talents into further discovering biology, chemistry, physics, earth science, engineering, and technology.

Science Olympiad involves a dedicated commitment to hard work, personal initiative, and bringing your current knowledge of all things science to an even higher level. You will learn to take risks and go above and beyond your comfort level in the different areas of science.

Science Olympiad activities correlate directly with the Next Generation Science Standards and 3-Dimensional learning that involves Disciplinary Core Ideas of the various sciences, Cross-Cutting concepts across all areas, and Science and Engineering Practices.

Come join us for a fun week of activities, new friendships, and love of Science!

Camp Agenda

During the week, we will engage students in a combination of the following hands on competitive STEM /Science Olympiad-type activities in a fun competitive environment giving incoming students a taste of what they will experience if they choose to join the Neuqua Valley Science Olympiad team when they are in high school.

Tentative Event Descriptions

Giant Bubbles: Students work in small groups to create a device and solution for creating giant soap bubbles.

Bottle rocket Plane: Students design and build a rocket airplane from a 2L bottle. They design a payload system to carry an egg. Rockets are launched with a air pressure and water launch system. Points are awarded for longest flight with an intact egg.

Experimental Design Student partners are given a set of unknown objects and a rubric to design, conduct, analyze, and write a technical lab report using claim, evidence, and reasoning in their conclusions.

Write It, Do It: Students will create a small model using limited supplies. They then write a detailed description of how to replicate the model. Their partner will get the supplies and the directions and have to build the model.

Paper Chair Challenge: Students use nothing but paper to build a chair. Points will be awarded to the chairs that hold a student using the fewest pieces of paper.

Escape Room Student teams will work cooperatively to navigate their way through a room of scientific/mathematical/and reasoning clues to 'escape' with the solution to a problem.

Rubber Band Car: Teams members will build a car from a paper tube powered by a rubber band. The competition involves the car travelling a designated distance in the shortest amount of time.

Medical Research Challenge: Students will be given links and videos to research medical topics. They will then answer questions pertaining to each topic researched.

Enzyme Simulation: Students will use pop beads to simulate enzymatic activity with several different scenarios.

"Distribution of information and materials through the school district does not imply District 204 endorsement."