

Science Olympiad

St. Charles (6th-8th)

Frequency: 1 practice per week, after school, October- March/April

Cost: \$40 (covers state registration, invitationals and supplies)

COVID-19 Safety: Masks are required. Students will work primarily with only one partner.

Links: For more information:

National: <https://www.soinc.org/>

State: <https://ohso.osu.edu/>

Event Forums: <https://scioly.org/>



General Description

Science Olympiad is a team competition in which students compete in 23 events pertaining to various scientific disciplines, including genetics, earth science, chemistry, anatomy, physics, geology, mechanical engineering and technology. Students must be available to participate in the virtual regional meet on March 19, 2022. We would like to participate in 2 additional virtual meets before March.

Events

Anatomy and Physiology, BioProcess Lab, Bridges, Codebusters, Crave the Wave, Crime Busters, Disease Detectives, Dynamic Planet, Electric Wright Stuff, Experimental Design, Food Science, Green Generation, Meteorology, Mission Possible, Mousetrap Vehicle, Ornithology, Ping Pong Parachute, Road Scholar, Rocks and Minerals, Solar System, Sounds of Music, Storm the Castle, and Write It, Do It

Going Forward

If your child would like to participate in Science Olympiad this year, please fill out this survey by October 15.

https://docs.google.com/forms/d/12z7gq58HKx4S4eSRRy5A4xmlyTUijJPqLT_7txcPf9Y/

If you or your child would like more information, please attend our informational meeting on Oct. 7 at 6:30pm in the art room. Enter through the Walsh Hall doors. Please fill out the survey or send your email address to tegan@stcharleskettering.org.

Science Olympiad Division B Events 2021-2022

Anatomy and Physiology Understanding and applying knowledge of the human Nervous System, Sensory Organs, and Endocrine System.

BioProcess Lab Competition of lab work in life sciences/biology at a middle school level.

Bridges Design, Construct, and Test a bridge to achieve the highest structural efficiency.

Codebusters Analyze and decode encrypted messages for historical and modern advance ciphers.

Crave the Wave Solve problems and answer questions regarding all types of waves and wave motion.

Crime Busters Solve a crime by analyzing evidence and use chemistry knowledge of powder analysis.

Disease Detectives Use investigative skills in the scientific study of disease, injury, health, and disability in populations of people. Uses immunology and epidemiology.

Dynamic Planet Uses process skills to complete tasks related to Earth's fresh waters.

Electric Wright Stuff Build an airplane and practice test flights to achieve the maximum time aloft using drone engines.

Experimental Design Design, Conduct, and analyze the data collected from the experiment.

Food Science Food chemistry with a focus on sugars. Students will also build and use a hydrometer to measure sugar solutions.

Green Generation Demonstrate an understanding of general ecological principles, human impact on the environment, solutions to reversing trends, and sustainability concepts.

Meteorology Demonstrate understanding of factors that influence world climate and climate change through interpretation of climatologic data, graphs, charts, and images.

Mission Possible Build, test, and document a Rube Goldberg device that completes specific actions.

Mousetrap Vehicle Design, build, and test a vehicle to reach a target point as accurately as possible.

Ornithology Students will be assessed on their knowledge of North American birds.

Ping Pong Parachute Design, build, and test indoor bottle rockets to launch and keep aloft, a parachute with a ping pong ball attached.

Road Scholar Students answer interpretive questions that may use state maps, topographic maps, a road atlas, and satellite/aerial images.

Rocks and Minerals Students demonstrate their knowledge of rocks and minerals.

Solar System Students will demonstrate knowledge of planet formation and structure in our solar system and how it relates to that observed in extrasolar systems.

Sounds of Music Design and build a musical instrument capable of playing a one-octave 12-tone scale and complete a written test on the physics of sound and music concepts.

Storm the Castle Design, construct and calibrate a device capable of launching projectiles onto a target and collect data regarding the device.

Write it, Do It One student writes a description of an object and how to build it, and a second student will attempt to construct the object from the directions