



DIV. B CHEMISTRY LAB EQUIPMENT LIST

See General Rules, Eye Protection & other Policies on www.soinc.org as they apply to every event.

Each team may bring any or all of the items listed below for use in Division B Chemistry Events. Teams not bringing these items will be at a disadvantage as Event Supervisors will not provide the listed lab equipment. A penalty of up to 10% may be given if a team brings prohibited lab equipment to the event.

Item	Expected Use
Box	Containing all of the kit materials
Graduated Cylinders (10 - 100 mL)	Measuring volumes
Beakers (50 - 500 mL)	Doing reactions, developing chromatograms
Erlenmeyer Flasks (50 - 250 mL)	Doing reactions
Test Tubes	Mix Chemicals, heat chemicals
Test Tube Brush	Clean Test Tubes
Test Tube Holder	Holds test tubes for heating
Test Tube Rack	Hold Test Tubes
Petri Dishes	Doing reactions, developing chromatograms
Spot Plates	Doing reactions in semi-micro scale, testing solubility, pH
Slides	To put hairs, crystals, or fibers on for use with a microscope
Cover Slips	To prevent items from coming off slides
Droppers	Add small amounts of liquids to reactions
Spatulas or spoons	Getting small amounts of solids out of containers
Stirring Rods	Stirring mixtures
Thermometer	Determining the temperature of a solution
Metal Tongs, Forceps, or Tweezers	Holding objects, retrieving objects from liquids
pH paper/meter	Test acidity or alkalinity of solution
Hand Lens	Magnification of small items for identification
9V or less Battery Conductivity Tester	Determining ionic strength of solution
Paper Towels	Cleaning
Pencil	Writing, Marking Chromatogram
Ruler	Measuring lengths
Magnets	For extraction and identification of iron filings

The following document was prepared to offer some guidance to teams as they select calculators for use in different Science Olympiad events. **The calculator class listed in the event rules is the most complex calculator level allowed for the event. It is acceptable to use a lower calculator class in the event (e.g., Class III calculator is allowed for the event students are therefore allowed to use a class I, class II or class III calculator).** By no means are the calculators listed here inclusive of all possible calculators; instead they are offered as common examples. The decisions of the event supervisors will be final.

Class I - Stand-alone non-graphing, non-programmable, non-scientific 4-function or 5-function calculators are the most basic type of calculators and often look like the one shown to the right. These calculators are limited to the four basic mathematics functions and sometimes square roots. These calculators can often be found at dollar stores.



Class II - Stand-alone non-programmable, non-graphing calculators look like the calculator to the right or simpler. There are hundreds of calculators in this category but some common examples include: CASIO FX-260, Sharp EL-501, and TI-30X.



Class III- Stand-alone, programmable, graphing calculators and stand-alone non-graphing, programmable calculators, often look like the calculator shown on the right. Some examples are: Casio 975 0/9850/9860, HP 40/50/PRIME, and TI 83/84/89/NSPIRE/VOYAGE.

To identify a stand-alone non-graphing, programmable calculators Are look for the presence of the 'EXE' button, the 'Prog' button, or a 'file' button. Examples include but are not limited to: Casio Super FXs, numerous older Casio models, and HP 35S. A calculator of this type with the buttons labeled is shown to the right.

PROG Button



EXE Button



Class IV - Calculator applications on multipurpose devices (e.g., laptop, phone, tablet, watch) are not allowed unless expressly permitted in the event rule.



This resource was created to help teams comply with the Science Olympiad Policy on Eye Protection adopted on July 29, 2015 and posted on the Science Olympiad Website (soinc.org).

Participant/Coach Responsibilities: Participants are responsible for providing their own protective eyewear. Science Olympiad is unable to determine the degree of hazard presented by equipment, materials and devices brought by the teams. Coaches must ensure the eye protection participants bring is adequate for the hazard. All protective eyewear must bear the manufacturer's mark Z87. At a tournament, teams without adequate eye protection will be given a chance to obtain eye protection if their assigned time permits. If required by the event, participants will not be allowed to compete without adequate eye protection. This is **non-negotiable**.

Corresponding Standards: Protective eyewear used in Science Olympiad must be manufactured to meet the American National Standards Institute (ANSI) standard applicable at its time of manufacture. The current standard is ANSI/ISEA Z87.1-2015. Competitors, coaches and event supervisors are not required to acquire a copy of the standard. The information in this document is sufficient to comply with current standards. Water is not a hazardous liquid and its use does not require protective eyewear unless it is under pressure or substances that create a hazard are added.

Compliant Eyewear Categories: If an event requires eye protection, the rules will identify one of these three categories. Compliance is simple as ABC:

CATEGORY A

- Description: Non-impact protection. They provide basic particle protection only
- Corresponding ANSI designation/required marking: Z87
- Examples: Safety glasses; Safety spectacles with side shields; and Particle protection goggles (these seal tightly to the face completely around the eyes and have direct vents around the sides, consisting of several small holes or a screen that can be seen through in a straight line)

CATEGORY B

- Description: Impact protection. They provide protection from a high inertia particle hazard (high mass or velocity)
- Corresponding ANSI designation/required marking: Z87+
- Example: High impact safety goggles

CATEGORY C

- Description: Indirect vent chemical/splash protection goggles. These seal tightly to the face completely around the eyes and have indirect vents constructed so that liquids do not have a direct path into the eye (or no vents at all). If you are able to see through the vent holes from one side to the other, they are NOT indirect vents
- Corresponding ANSI designation/required marking: Z87 (followed by D3 is the most modern designation but, it is not a requirement)
- Example: Indirect vent chemical/splash protection goggles

Examples of Non-Compliant Eyewear:

- Face shields/visors are secondary protective devices and are not approved in lieu of the primary eye protection devices below regardless of the type of vents they have.
- Prescription Glasses containing safety glass should not be confused with safety spectacles. "Safety glass" indicates the glass is made to minimize shattering when it breaks. Unless these glasses bear the Z87 mark they are not approved for use.

Notes:

1. A goggle that bears the Z87+ mark and is an indirect vent chemical/splash protection goggle will qualify for all three Categories A, B & C
2. VisorGogs do not seal completely to the face, but are acceptable as indirect vent chemical/splash protection goggles



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STORE OFFERINGS FOR 2026

STORE.SOINC.ORG

STARTER STACKS & PACKS

Jumpstart your 2026 season with these resources! Starter Packs come with notes and practice tests for individual events. Create your own custom Stacks for specific events, or grab a ready-to-go Starter Stack!



NATIONAL TEST PACKETS

Check out the tests from the 2025 National Tournament! You can access packets that include tests, answer keys, and results from the past five National Tournaments.

UPCOMING EVENTS

- **July '26** In our **Virtual Bootcamp** participants gain early access to the 2027 Rules, engage with experts, and choose sessions that fit their interests. Registration includes instructional videos, live sessions and a hard copy draft of the 2027 Rules.
- **July '26** The **Summer Build Clinic** provides a deep dive into the new events for the 2027 season. This is a great opportunity to collaborate with presenters and other coaches, as well as gain hands-on experience for the upcoming season. This event is for coaches, not students.





Official Science Olympiad kits!

Kits will be available for multiple 2026 Events

- ▶ Boomilever ▶ Circuit Lab ▶ Crime Busters ▶ Division B Chemistry Equipment Kit
- ▶ Helicopter ▶ Hovercraft ▶ Machines ▶ Photogate System ▶ Rocks & Minerals
- ▶ Scrambler ▶ Water Quality: Application of Water Quality Principles
- ▶ Water Quality: Impacts of Environmental Factors

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NATIONAL TOURNAMENT SCHEDULE

See General Rules, Eye Protection & other Policies on www.soinc.org as they apply to every event.

2026 National Tournament Division B Schedule University of Southern California Los Angeles, California Saturday, May 23, 2026

	7:00 – 8:00	8:00 - 9:00	9:10 – 10:10	10:20 – 11:20	12:00 – 1:00	1:10 – 2:10	2:20 – 3:20	7:30– 9:30	
Event	AM	AM	AM	AM	PM	PM	PM	PM	
Anatomy & Physiology B		51-60	1-10	11-20	21-30	31-40	41-50	Closing Ceremony	
Boomilever B		Self-Schedule							
Circuit Lab B		31-40	41-50	51-60	1-10	11-20	21-30		
Codebusters B		1-10	11-20	21-30	31-40	41-50	51-60		
Crime Busters B		51-60	1-10	11-20	21-30	31-40	41-50		
Disease Detectives B		1-10	11-20	21-30	31-40	41-50	51-60		
Dynamic Planet B		31-40	41-50	51-60	1-10	11-20	21-30		
Entomology B		11-20	21-30	31-40	41-50	51-60	1-10		
Experimental Design B		11-20	21-30	31-40	41-50	51-60	1-10		
Helicopter B		Self-Schedule							
Heredity B		41-50	51-60	1-10	11-20	21-30	31-40		
Hovercraft B	Impound	Self-Schedule							
Machines B		21-30	31-40	41-50	51-60	1-10	11-20		
Meteorology B		21-30	31-40	41-50	51-60	1-10	11-20		
Metric Mastery B		21-30	31-40	41-50	51-60	1-10	11-20		
Mission Possible B	Impound	Self-Schedule							
Potions & Poisons B		41-50	51-60	1-10	11-20	21-30	31-40		
Remote Sensing B		1-10	11-20	21-30	31-40	41-50	51-60		
Rocks and Minerals B		41-50	51-60	1-10	11-20	21-30	31-40		
Scrambler B	Impound	Self-Schedule							
Solar System B		11-20	21-30	31-40	41-50	51-60	1-10		
Water Quality B		31-40	41-50	51-60	1-10	11-20	21-30		
Write It Do It B		51-60	1-10	11-20	21-30	31-40	41-50		



Exploring the World of Science

Science Olympiad wishes to acknowledge the following business, government and education leaders for partnering with our organization. Working together, we can increase global competitiveness, improve science and technology literacy and prepare the STEM workforce of the future. Thanks to: University of Southern California (2026 National Tournament Host), University of Nebraska-Lincoln (2025 National Tournament Host), NASA's Universe of Learning Astrophysics STEM Learning and Literacy Network, Science Olympiad USA Foundation, Atwell Gives Foundation, Avantor Foundation, Ward's Science, Cleveland-Cliffs Foundation, Combined Federal Campaign, Google, Illinois Quantum & Microelectronics Park: IQMP, P33, Ramboll, Aerospace Corporation, Amcor Cares Foundation, Cambridge Centre for International Research, Centers for Disease Control and Prevention, CodeHS, Discovery Education 3M Young Scientist Challenge, Double Good Foundation, IEEE Geoscience and Remote Sensing Society (GRSS), InGenius Prep, National Free Flight Society, North American Association for Environmental Education, National Oceanic and Atmospheric Administration, Onshape, Prequel, SkyCiv, Texas Instruments, TKS World, University of Delaware, Investing in Communities, MDRT Foundation and Yale Young Global Scholars. Strategic Partners: 3D Molecular Designs, Japan Science and Technology Agency, mHUB, Midnight Science Club, MxD, NBC Universal Foundation, STEMConnector.

See the Science Olympiad website: www.soinc.org for current information regarding Policies, Standards, Summer Workshops, Official Kits from Ward's Science and print plus digital items in the Science Olympiad Store

Science Olympiad

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