

Science Olympiad National Recommendations on Building and the Use of Tools

In Accordance with the Rules and Ethics of Science Olympiad

The underlying principles and intent of the Science Olympiad establish a mandated student performance. Any project, device or assembly is to be constructed by a student or team of students. The Rules and Code of Ethics of the Science Olympiad declares, "One or more of a 15-member team must have constructed all pre-built devices presented for judging." The process of design and resultant product is the students' responsibility. All components must be made by the student or, if permissible by the event rules, available by purchase. Students will assemble the device.

Safety Concerns and the Use of Tools

Safety shall be of paramount importance. Students will be encouraged to use tools and technology within their age-related safety range. Certain tools and methods may be hazardous and beyond the abilities of various age groups. Specific tools may include power drills and saws, wood or metal lathes, welding equipment, milling machines or metal casting equipment. The use of chemicals should also follow age-appropriate use rules.

Guidelines for Adult Mentoring

Adults may act as facilitators in the building process by asking questions, offering ideas or suggestions and providing references. The adult assistance may include teaching underlying principles, skills, use of tools and adherence to safety rules. No component of the project shall be constructed or assembled by an adult. The student must prepare the entire structure, including accompanying charts, graphs or notes.

However, Science Olympiad endorses adult mentoring of teams and realizes that adults do instruct students on proper techniques on the use of tools. Providing an adult does not interfere with, alter, build or compromise the student or group design, adults MAY assist by performing restricted tasks not available to a student (such as drilling a hole in a metal plate or operating a power saw). This type of limited help does not compromise the integrity of a student-built device.

Investigation of Suspected Violation of Building and Tools Recommendations

Tournament officials must rely on the integrity of principals, coaches, students and parents involved in Science Olympiad. Astute and professional Event Supervisors will be able to evaluate student compliance as such:

- Event supervisors may extensively question the lead student as to the design and construction of the device. Questioning may include the overall design and construction as well as the component parts and how they operate and function within the device. Other students on the device team may also be questioned.
- Each team coach will be required to certify that all work presented for the tournament complies with the Building and the Use of Tools Recommendations.

Sanctions for Non-Qualified Participation

If the students on the device team cannot answer the questions correctly and/or the coach cannot verify the device was student-built, then the Event Supervisors have grounds to believe the students did not design and build the device. The team will be disqualified from the event and scored accordingly.