



## Science Olympiad 2021 National Tournament Rules Modifications

### General Tournament Modifications

- The 2021 Science Olympiad National Tournament will be conducted as a remote tournament following the general approach taken under the MiniSO Competition model. All teams and participants are expected to follow Science Olympiad's Code of Conduct and act accordingly as if this were an in-person tournament. Coaches are asked to review the Code of Conduct and expectations for this tournament with their teams.
- Unless otherwise indicated, participants are expected to compete through the Scilympiad online platform in a location separate from their partners, teammates, and coaches. It is the expectation of this tournament that outside of a few Build events partners will not be in the same location able to physically work together.
- The Scilympiad platform was developed to accommodate the delivery of a remote Science Olympiad tournament in accordance with our values of integrity and excellence. It has the ability to record when participants are outside of the Scilympiad competition browser. Participants should only be out of the browser for select events and as permitted by the rules or permitted by the Event Supervisor as part of an event.
- To avoid any Out of Browser Time being accrued during an event all participants in the event should:
  - make sure that their computers are fully charged or plugged in;
  - disable any and all pop-up notifications (i.e.; email notifications, alarms, calendar notifications, or automatic updates) that may be active or set on their device; and,
  - compete using a computer, laptop, or Chromebook.
- To avoid any Out of Browser Time being accrued during an event all participants in the event should not:
  - have any other window, tab, application (i.e.; Netflix, Spotify, Pandora, Discord) open other than the Scilympiad competition browser;
  - open multiple tabs or browsers accessing the Scilympiad competition browser at the same time;
  - use electronic notes or resources for an event unless it explicitly states in the 2021 Rules, or in the following Specific Event Modifications, they are allowed; and,
  - compete using a tablet or phone.
- With the exceptions of Write It Do It and Write It CAD It, participants should feel free to communicate with their assigned event partner using the Scilympiad competition platform chat window or any other communication method or device they feel most comfortable with. If participants use a communication method outside of the Scilympiad competition platform chat window they are advised to do so on a separate device as other electronic communication platforms (i.e., Discord, Zoom, iChat, Skype, Meets) will be recorded as Out of Browser Time which could result in the penalties being applied.

## **Specific Event Modifications**

### **Anatomy & Physiology (Divisions B & C)**

- Participants are each allowed one 8.5" x 11" sheet of paper may contain information on both sides along with a stand-alone non-programmable, non-graphing calculator in accordance with the published 2021 Rules.
- Out of Browser Time penalties will be applied to this event.

### **Astronomy (Division C Only)**

- Each participant may have one of the following options containing information in any form and from any source:
  - two three-ring binders;
  - a computer/tablet and a three-ring binder; or,
  - two computers/tablets, of any kind.
- If three ring binders are used they may be of any size and the information contained should be attached using the available rings. The information or pages may be removed during the event. Sheet protectors and laminated sheets are allowed.
- Each participant may also have a stand-alone calculator of any type to use during the event. If the participants are using a computer/tablet they may use the calculator app or other program on their device in place of a stand-alone calculator.
- Participants using computers/tablets as a resource should have all information stored so that it is available to them offline.

### **Boomilever (Divisions B & C)**

- This will be a LIVE, self-scheduled Trial Event not counting towards overall team standing conducted over Zoom.
- Anyone interested in competing will do so on Saturday, May 22<sup>nd</sup>.
- Each team competing will need to have two video cameras (one in a fixed position & one mobile)
- Both participants do not need to be physically together to compete in the event; though the participant who will be testing the Boomilever needs to have an adult present.
- When Teams log into Zoom they will need to rename themselves with their Team Number & School Name (e.g.; C21-West Texas HS or B35-Oxford MS)
- Additional instructions can be found on Scilympiad under the Resources tab in Tournament Documents.

### **Chemistry Lab (Division C Only)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Each participant is allowed the resources specified in 2.b. in the published 2021 Chemistry Lab Rules.
- Out of Browser Time penalties will be applied to this event.

### **Chiropterology (Divisions B & C)**

- This will be a Trial Event not counting towards overall team standing.
- It will take place at 12:00 PM Pacific Time on Saturday, May 22<sup>nd</sup>.
- Out of Browser Time penalties will be applied to this event.

- Rules for this event can be found on the Science Olympiad National Tournament webpage (<https://www.soinc.org/2021-national-tournament>).

### **Circuit Lab (Divisions B & C)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Each participant may have access to one three-ring binder of any size containing information in any form and from any source attached using the available rings as well as writing utensils and a stand-alone calculator.
- Out of Browser Time penalties will be applied to this event.

### **Codebusters (Division C Only)**

- Each participant may have a non-graphing, nonprogrammable, nonscientific 4-function or 5-function stand-alone calculator.
- Participants do not need to be physically together to compete in the event and may communicate with one another through whatever platform or device they feel most comfortable with.
- Out of Browser Time penalties will be applied to this event.

### **Crime Busters (Divisions B Only)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Each participant may bring one 8.5" x 11" sheet of paper containing information on both sides.

### **Density Lab (Division B Only)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Each participant may have access to one three-ring binder of any size containing information in any form and from any source attached using the available rings as well as writing utensils and a stand-alone calculator.
- Out of Browser Time penalties will be applied to this event.

### **Designer Genes (Division C Only)**

- Participants are each allowed one 8.5" x 11" sheet of paper may contain information on both sides along with a stand-alone non-programmable, non-graphing calculator in accordance to the published 2021 Rules.
- Out of Browser Time penalties will be applied to this event.

### **Detector Building (Division C Only)**

- This will be a combined test through Scilympiad and a self-scheduled video submission Trial Event not counting towards overall team standing.
- All logs, materials, and videos must be uploaded by 11:59 PM PDT/MST on May 19<sup>th</sup>.
- The test portion of the event will take place on Saturday, May 22<sup>nd</sup> at 11:30 AM PDT/MST
- Both participants do not need to be physically together to compete in the event; though the participant who will be testing the device needs to have an adult present.
- Additional instructions can be found on Scilympiad under the Resources tab in Tournament Documents.

### **Digital Structures (Divisions B & C)**

- This will be a Trial Event not counting towards overall team standing.
- It will take place at 12:00 PM PDT/MST Time on Saturday, May 22<sup>nd</sup>
- This event starts in Scilympiad and finishes in SkyCiv. At the start of the event, participants should log into Scilympiad and start the Digital Structures test to submit their Estimated Load Supported and see the specified parameters (distance from origin to Contact Width Lines, minimum distance between the Testing Wall and the Loading Point closest to the Testing Wall); students have 5 minutes to complete the test and to record the specified parameters elsewhere. Teams will not have access to the parameters in Scilympiad once the 5 minutes are complete.
- After the Scilympiad test, teams must design, test, and submit their Boomilever in SkyCiv within 45 minutes of when they started the Scilympiad test. Details for submission will be provided on the day of the tournament via the Scilympiad test.
- To submit their structure, each team must enable the Science Olympiad add-on in SkyCiv AND turn on Competition Mode before starting their work. Once in Competition Mode, previously built structures cannot be imported and structures can be tested only 5 times before submission. Participants are locked into Competition Mode for 48 hours.
- Since only one person can use the model in SkyCiv, the person making the model should share screen and/or video chat via a method outside of Scilympiad such as Google Meet, Zoom, Facebook Messenger, FaceTime, etc.
- Teams without an existing SkyCiv account who want to compete in Digital Structures should contact the Science Olympiad National Office (<https://www.soinc.org/info/contact-science-olympiad>).
- Rules for this event can be found on the Science Olympiad National Tournament webpage (<https://www.soinc.org/2021-national-tournament>).

### **Disease Detectives (Divisions B & C)**

- Participants are each allowed one 8.5" x 11" sheet of paper may contain information on both sides along with a stand-alone non-programmable, non-graphing calculator in accordance to the published 2021 Rules.
- Additional instructions for Division C can be found on Scilympiad under the Resources tab in Tournament Documents.
- Out of Browser Time penalties will be applied to this event.

### **Dynamic Planet (Divisions B & C)**

- Each participant may bring one 2" or smaller three-ring binder containing information in any form and from any source and a stand-alone calculator of any type in accordance to the published 2021 Rules.
- Out of Browser Time penalties will be applied to this event.

### **Elastic Launched Glider (Division B Only)**

- This will be a Trial Event not counting towards overall team standing.
- This event will be conducted through document and video submission.
- All materials must be uploaded by 11:59 PM PDT/MST on May 19<sup>th</sup>.
- Additional instructions can be found on Scilympiad under the Resources tab in Tournament Documents.

### **Experimental Design (Divisions B & C)**

- This event will be delivered through Scilympiad with teams completing a hands-on experiment and submitting the results.
- Participants do not need to be physically together to compete in the event and may communicate with one another through whatever method or device they feel most comfortable with.
- The Event Supervisors will identify a set of items that may or may not be needed to complete the experiment required by this event. All participants will need to have these items on hand during the competition on Saturday, May 22<sup>nd</sup>.
- The item list for each Division will be posted at Scilympiad on Friday, May 14<sup>th</sup>.
- During the event the research question and a Google Form link that will be used for submission of the teams report will be displayed in Scilympiad. Teams should open the form at the start of the event, because the link will be unavailable once the event concludes.
- The team will then use the appropriate materials to design and conduct an experiment in accordance with the published event rules in the 2021 Rules Manuals.
- The team will be expected to submit a report by completing the appropriate sections in Scilympiad. Additional materials such as tables, graphs, and diagrams/photos/sketches will be submitted via the provided Goggle Form.
- Teams will have up to 5 minutes after the event ends to submit their report.
- Submissions are timestamped, and failure to submit within the allotted time may result in your work being unscored.

### **Food Science (Division B Only)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Each participant is allowed the resources specified in 2.a. in the published 2021 Food Science Rules.

### **Forensics (Division C Only)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Each participant is allowed the resources specified in 2.a. in the published 2021 Forensics Rules.

### **Fossils (Divisions B & C)**

- Each participant may bring one 2" or smaller three-ring binder containing information in any form and from any source and an unmodified and unannotated copy of 2021 Science Olympiad Official Fossils List which does not have to be secured in the binder in accordance to the published 2021 Rules.
- Out of Browser Time penalties will be applied to this event.

### **Game On (Division B Only)**

- This event will be run through Scilympiad using the Scratch program (available for download from <http://scratch.mit.edu>)
- Teams will submit their Game via a Google Form.
- The link to the Google Form will be provide through Scilympiad.

### **Geologic Mapping (Division C Only)**

- Each participant may bring one 2" or smaller three-ring binder containing information in any form and from any source and a stand-alone calculator of any type in accordance to the published 2021 Rules.
- Each participant may also bring one protractor, one ruler, and one set of colored pencils.
- Each team may also have at least one geologic compass for their use.
- Prior to the tournament, teams will be provided with links to websites where they can obtain the maps that will be used during this event. It is recommended that each participant download the maps and have them available during the competition.
- These maps may be printed at the team's discretion.

### **Gravity Vehicle (Division C Only)**

- This will be a Trial Event not counting towards overall team standing.
- This event will be conducted through document and video submission.
- The Target Distance for this event will be between 3 and 6 meters. (Note: This is a modification from the published 2021 Rules).
- The exact Target Distance for the Event and the link to the Google Form to submit all materials will be available through Scilympiad on Friday, May 14<sup>th</sup> at 4:00 AM PDT/MST.
- Teams will have 5 hours from their initial login into the event in Scilympiad to access the required Target Distance, complete their video, and upload all materials.
- Any team competing in this event must have all materials uploaded by 11:59 PM PDT/MST on May 19<sup>th</sup>.
- Additional instructions can be found on Scilympiad under the Resources tab in Tournament Documents.

### **Heredity (Division B Only)**

- Participants are each allowed one 8.5" x 11" sheet of paper may contain information on both sides along with a stand-alone non-programmable, non-graphing calculator in accordance to the published 2021 Rules.
- Out of Browser Time penalties will be applied to this event.

### **Machines (Divisions B & C)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Each participant may have access to one three-ring binder of any size containing information in any form and from any source attached using the available rings as well as writing utensils and a stand-alone calculator.
- Out of Browser Time penalties will be applied to this event.

### **Meteorology (Division B Only)**

- Participants are each allowed two 8.5" x 11" sheets of paper containing information on both sides in accordance to the published 2021 Rules.

### **Mission Possible (Division B Only)**

- This will be a LIVE, self-scheduled Trial Event not counting towards overall team standing conducted over Zoom.
- Both participants do not need to be physically together to compete in the event; though the participant who will be testing the device needs to have an adult present.
- Anyone interested in competing will do so on Saturday, May 22<sup>nd</sup>.
- When Teams log into Zoom they will need to rename themselves with their Team Number & School Name (e.g.; B35-Oxford MS)
- Additional instructions can be found on Scilympiad under the Resources tab in Tournament Documents.

### **Mousetrap Vehicle (Division B Only)**

- This will be a Trial Event not counting towards overall team standing.
- This event will be conducted through document and video submission.
- The Target Distance for this event will be between 3 and 6 meters. (Note: This is a modification from the published 2021 Rules).
- The exact Target Distance for the Event and the link to the Google Form to submit all materials will be available through Scilympiad on Friday, May 14<sup>th</sup> at 4:00 AM PDT/MST.
- All materials, including the video, must be uploaded by 11:59 PM PDT/MST on May 19<sup>th</sup>.
- Additional instructions can be found on Scilympiad under the Resources tab in Tournament Documents.

### **Ornithology (Divisions B & C)**

- Each participant may bring one 2" or smaller three-ring binder containing information in any form and from any source, one commercially produced field guide not contained in the binder, and an unmodified and unannotated copy of 2021 National Bird List which does not have to be secured in the binder in accordance to the published 2021 Rules.

### **Protein Modeling (Division C Only)**

- This event will consist of only a test delivered through Scilympiad; there will be no evaluation of a pre-built model for this event.
- For the National Tournament, teams should be ready to answer questions about the cytidine deaminase protein and the BE4 expression on the [addgene.org](https://addgene.org). Even though the prebuild portion of the event has been canceled, there will be questions on the exam about these materials.

### **Reach for the Stars (Division B Only)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Participants are each allowed two 8.5" x 11" sheets of paper containing information on both sides along with a stand-alone non-programmable, non-graphing calculator in accordance to the published 2021 Rules.
- Out of Browser Time penalties will be applied to this event.

### **Road Scholar (Division B Only)**

- Each participant may have a stand-alone non-programmable, non-graphing calculator, protractor, ruler, other measuring device, USGS Map Symbol Sheet, hard copies of other information in any form and from any source, and colored marking devices consistent with the colors utilized on USGS topographic maps in accordance to the published 2021 Rules.

### **Sounds of Music (Division C Only)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Each participant may have access to one three-ring binder of any size containing information in any form and from any source attached using the available rings as well as writing utensils and a stand-alone calculator.
- Out of Browser Time penalties will be applied to this event.

### **Water Quality (Divisions B & C)**

- This event will consist of only a test delivered through Scilympiad; there will be no hands-on portion for this event.
- Participants are each allowed one 8.5" x 11" sheet of paper may contain information on both sides along with a stand-alone non-programmable, non-graphing calculator in accordance to the published 2021 Rules.
- Out of Browser Time penalties will be applied to this event.

### **Wright Stuff (Division C Only)**

- This will be a Trial Event not counting towards overall team standing.
- This event will be conducted through document and video submission.
- Teams will be provided with a link to a Google Form to submit their materials via Scilympiad.
- All materials must be uploaded by 11:59 PM PDT/MST on May 19<sup>th</sup>.
- Additional instructions can be found on Scilympiad under the Resources tab in Tournament Documents.

### **Write It CAD It (Divisions B & C)**

- This will be a Trial Event not counting towards overall team standing.
- It will take place at 12:00 PM PDT/MST on Saturday, May 22<sup>nd</sup>.
- It will be run through Scilympiad on the TinkerCAD platform.
- All CADers for this event should create an account in TinkerCAD (<https://www.tinkercad.com/join>) prior to the National Tournament.
- Writers should click outside the free response box at least once. It is recommended to do it periodically.
- CADers should log into their TinkerCAD accounts as well as Scilympiad when their event starts. CADers will copy and paste the link provided by the Event Supervisor into TinkerCAD.
- Rules for this event can be found on the Science Olympiad National Tournament webpage (<https://www.soinc.org/2021-national-tournament>).
- No direct communication between partners is allowed during this event.

### **Write It Do It (Divisions B & C)**

- This event will be delivered through Scilympiad.
- No direct communication between partners is allowed during this event.
- Participants are expected to compete in this event in accordance with the published event rules in the 2021 Rules Manuals.
- The Event Supervisors will identify a set of items that the “Doer” may or may not need on hand to complete the design using the instructions provided by the “Writer” during this event.
- The item list for each Division will be posted at Scilympiad on Friday, May 14<sup>th</sup>.
- During the event the “Writer” will compose instructions in Scilympiad which will share them with the “Doer”.
- The “Doer” will then use the appropriate materials to build the design based on the instructions and submit pictures of their build at the end of the event via a Google Form.
- The link to the Google Form will be provided to the “doer” in Scilympiad.
- Additional instructions can be found on Scilympiad under the Resources tab in Tournament Documents.