Letter, 12/19/2020

Coaches and Competitors,

As we have heard feedback from virtual invitational tournaments across the country, WSO has modified some events and our tournament format to provide the best experience we can for Washington regional and state tournaments.

This 12/19/20 version of the document supersedes the original dated 11/6/20. **Changes have been noted in Change Log (next page) and within the text of the document.**

As always, if you have any questions, please contact Sue Murphy, Washington State Director, statedirector@washingtonscienceolympiad.com.

Washington Science Olympiad 2020-21 Events Changes, Event List, and Test Format/Accommodations

Change Log

Modifications to this document are summarized here and identified within the text of the document.

December 19 Changes:

- All test events will be tracked using Scilympiad's feature to monitor time spent out of the test environment, when appropriate. Tracking is visible to competitors.
  - Exceptions (at this time): Astronomy, Protein Modeling, Experimental Design, Game On.
  - The Event Supervisor will make final decisions for penalties for teams whose *combined* time spent out of the test tab exceeds **one minute.** Penalties shall be no less than a tiered ranking at regionals and possible DQ at state. If a competitor accidentally leaves the test tab, he/she should let the supervisor know ASAP.
- In order to show flexibility during this challenging time to prepare, **no shows will be scored as C+1**, where C is the number of *competing teams*, instead of N+1, where N is the total number of *registered teams.* Participation scores will also be given as **C.** DQs and EDQs will not change.
- **Code Analysis**, Rule 2.f is expanded to add: *(iii) Free-response conceptual questions about coding principles;* and *(iv) Competitors will submit Java code to provide a solution to a problem presented by the test.*
- **Codebusters**
  - Sci Olympiad Codebusters test format will be used. The timer will be enforced. The timed question and associated bonus will not be given due to inconsistencies with the Scilympiad platform at this time.
- **Experimental Design**
  - Final materials list for regional/state tournaments announced (see Experimental Design in Individual Event Modifications section below).
  - The Event Supervisor will prepare a Google Doc template. Teams will copy doc and modify/complete. Teams are expected to submit hand-drawn graphs, tables, and statistics in this doc. An additional five minutes at the end of the test will be given to upload images and submit *only*.
- **Helicopter**
  - The single-rotor clarification from Camas is adopted. See Helicopter in Individual Event Modifications section below.
- **Trajectory**
  - A raised platform will not be used at regional or state tournaments.
  - In order to accommodate hallways, the targets and bucket will not be placed more than 50 cm to either side of the midline.
- **Gravity Vehicle and Mousetrap Vehicle**
  - In order to accommodate at-home testing, distances will be limited to 6-8 m, but with intervals *lowered* to every 25 cm for regionals, 5 cm at State.

Letter, 11/6/2020

Coaches and Competitors,

Welcome to the 2020-21 Washington Science Olympiad season! WSO apologizes for delay in getting final tournament information (schedule and event/tournament changes and accommodations) to coaches and participants. The state board carefully considered and discussed how best to ensure that Washington teams had the best options for competing in the Science Olympiad this year.

In this communication, you'll find WSO regional and state tournament information:
- Revised event list
- Modifications to individual events
- Links to replacement event rules
- Virtual testing formats
- … and more

As needed in the coming months, we will provide communication updates, additional accommodations, and answers to emailed questions. Q/A's will be posted to the WSO web site &/or the Scilympiad tournament coordination site (https://scilympiad.com/wa). Note that the State Director will forward questions to the board or Event Supervisor/s as necessary; so responses may take some time to be posted.

The WSO Scilympiad site will be used by coaches to register teams, enter students into regional tournament events, and manage their teams. Students will use this site to register their own personal accounts, view event instructions, and take event tests.

If you have any questions, please contact Sue Murphy, Washington State Director
statedirector@washingtonscienceolympiad.com

The WSO board is looking forward to an exciting year! Thank you for coming along for the ride.

*Summary of Event/Tournament Changes for WSO 2020-21

- **The following event replacements have been made (old -> new):**
  B Division:
  - Boomilever -> Digital Structures
    - REQUIRES each team to purchase SkyCiv license ($50) to participate
  - Elastic Launched Glider -> Helicopter
  - Ping Pong Parachute -> Trajectory
  - Write It, Do It -> Write It, CAD It

  C Division:
  - Boomilever -> Digital Structures
    - REQUIRES each team to purchase SkyCiv license ($50) to participate
  - Detector Building -> Code Analysis
  - Ping Pong Parachute -> Trajectory
  - Wright Stuff -> Helicopter
  - Write It, Do It -> Write It, CAD It

- **Regional and State virtual tournaments will be run on two consecutive Saturdays.**
  - WSO preference is for teams to compete at their school with oversight by their coach and/or school personnel. However, due to COVID uncertainty WSO has approached the events/rules modifications to allow for home-bound students to compete with parent/adult oversight. Modifications are intended to give school and home-bound competitors a fair playing field.
  - Some building event materials such as flight logs and pictures are due by 11:59 PM the Wednesday before the Day 2 Saturday - see Device Documentation below.
  - **[NEW: 12/19]** Participation & no-show scoring points changed.
  - Dates:
    - Regional Tournament Dates: **February 27 & March 6**, materials due March 3.
    - State Tournament Dates: **April 17 & 24**, materials due April 21.
    - Awards will be announced on Day 2; medals/trophies mailed coach.

- **Statewide regional virtual tournament**
  - *All* schools/teams register for the statewide regional tournament.
  - While event testing is done individually by school, each school/team will be identified for awards and advancement to the state tournament based on geographic region (Eastern, Northwest, Southwest).
  - Medals will be awarded within each region and mailed to team coach following the tournament.
  - The top half of teams competing in each division per region will advance to the state virtual tournament (with WSO policy that only two teams per school may advance to state).

- **Test format:**
  - Tests will be taken simultaneously on Scilympiad.com/wa. Teams may communicate any way they wish. The majority of written tests, but not all, occur on Day 1.
    - **[CHANGED: 12/19]** Any printed reference materials are allowed. **Digital reference materials are not allowed.**
  - Lab events will not require teams to supply any lab materials.
  - Building events - for the most part - require some materials turned in ahead of time for evaluation. The majority of events require a live test on Day 2 of the tournament.
  - **[NEW 12/19]:** Test events will be time-tracked to monitor time spent out of the test environment, when appropriate, to determine if accessing non-test sites.

*See details on the following pages. Info includes links to replacement event rules, special software needed for some events, deadlines for required submission of event materials, connectivity requirements, and more.

Event Changes

To adapt our 2020-21 tournament to use a virtual tournament format, Washington Science Olympiad has substituted the following events. Each event will be regularly scored with points applying to team totals (even though "Trial Event" may be identified on the rules, these will be scored events).

Added **Code Analysis (C)**
>Rules: https://www.soinc.org/sites/default/files/uploaded_files/Code_Analysis_091918.pdf
>Replaces **Detector Building (C)**
>*Easier to adapt to virtual than Detector Building.*

Added **Digital Structures (B / C)**
>Rules: https://www.soinc.org/sites/default/files/uploaded_files/DigitalStructures.pdf
>Replaces **Boomilever (B / C)**
>*Few teams have access to a boomilever wall; and reduce building events for accessibility at home.*

Added **Helicopter (B / C)**
>Rules: https://www.soinc.org/sites/default/files/uploaded_files/HelicoptersBC.pdf
>Replaces **Elastic Launched Glider (B) & Wright Stuff (C)**
>*Easier for competitors to find space to test and run Helicopters over ELG and WS.*

Added **Trajectory (B / C)**
>Rules: https://washingtonscienceolympiad.com/tournaments/2021_trajectory_B-C
>Replaces **Ping Pong Parachute (B / C)**
>*Ping Pong Parachute requires a gym that not all students may have access to.*

Added **Write It CAD It (B / C)**
>Rules: https://www.soinc.org/sites/default/files/uploaded_files/WriteItCadIt.pdf
>Replaces **Write It, Do It (B / C)**
>*Unable to logistically run WIDI virtually. In WICI, a CAD model is given to write-it students to provide instructions for do-it students to create using CAD software.*

Event List

	B Events	C Events
1	Anatomy and Physiology	Anatomy and Physiology
2	Circuit Lab	Astronomy
3	Crime Busters	Chemistry Lab
4	Density Lab	Circuit Lab
5	Digital Structures	Code Analysis
6	Disease Detectives	Codebusters
7	Dynamic Planet	Designer Genes
8	Experimental Design	Digital Structures
9	Food Science	Disease Detectives
10	Fossils	Dynamic Planet
11	Game On	Experimental Design
12	Helicopter	Forensics
13	Heredity	Fossils
14	Machines	Geologic Mapping
15	Meteorology	Gravity Vehicle
16	Mission Possible	Helicopter
17	Mousetrap Vehicle	Machines
18	Ornithology	Ornithology
19	Reach for the Stars	Protein Modeling
20	Road Scholar	Sounds of Music
21	Trajectory	Trajectory
22	Water Quality	Water Quality
23	Write It CAD It	Write It CAD It

WSO Virtual Tournament Defined, Adult Supervision and Accommodations

WSO initially proposed our regional and state tournaments would be Satellite under the assumption schools would be back in session by March 2021. With over 4 months remaining until the regional tournament, the WSO state board has reconsidered its approach to the regional and state tournaments – to have a hybrid Satellite/MiniSO tournament to allow any/all WA schools to participate in Science Olympiad this year no matter the situation in each school/district. The following information provides guidance on how the virtual tournaments will be modified to be a fair competition to all in either a school or home setting.

Adult Supervision: There must be adult supervision (provided by the team, e.g. school staff, team coach, etc.) for competing participant(s). The adult may assist participants logging into their events. For build events, adults may be asked to answer questions about the device's measurements and components, help measure and verify operational features of the device, and should refrain from being an advocate for the team's performance. The participant(s) must be prepared to explain their device on their own, but Event Supervisors may ask to speak to the adult if needed.

At-Home Accommodation: Should a team not be able to participate at their school, an adult or parent must be present. Parents may supervise their child's event. For build events, they may assist minimally (e.g. hold a vehicle or video camera, but must let the participant demonstrate knowledge of using their device on their own). Adult coaching during this time will count as a competition violation.

Device Documentation

DUE 3 DAYS PRIOR TO REGIONAL/STATE TOURNAMENT DAY 2

Tournament Director will provide materials submission instructions at least one month prior to the tournament. For each of the events listed below, **the coach** will submit **one** readable/viewable file as defined by the rules or submission instructions. Teams are responsible for ensuring that the Event Supervisor can see/read the files, etc.

In all cases - including at-home competition - only one device is expected to be built and used.

DIVISION B	DIVISION C
Density Lab: ● Device image(s)	**Gravity Vehicle:** ● Practice Log
Food Science: ● Device image(s)	**Helicopter:** ● Flight Log
Helicopter: ● Flight Log	**Machines:** ● Charts
Machines ● Device image(s)	**Protein Modeling:** ● Pictures
Mission Possible: ● Action Sequence List (including pictures)	**Sounds of Music:** ● Video
Mousetrap Vehicle: ● Practice Log	**Trajectory:** ● Design Log
Trajectory: ● Design Log	**Water Quality:** ● Device image(s)
Water Quality: ● Device image(s)	

Find details in Individual Event Modifications in the pages that follow.

Test Format and Accommodations

General Format

- Test events will be assigned a test slot based on the tournament schedule. There will continue to be scheduling conflicts, just as in a regular competition year.
    - There won't be scheduling accommodations for individual teams, teams are expected to be available for the scheduled event.
- Teams will take tests simultaneously.
- Tests will be scheduled for 50 minutes, and will begin promptly.
- **[NEW: 12/19]** In order to show flexibility during this challenging time to prepare, **no shows will be scored as C+1**, where C is the number of *competing teams*, instead of N+1, where N is the total number of *registered teams.* Participation scores will also be given as **C.** DQs and EDQs will not change.
- **[NEW 12/19]:** All test events will be tracked using Scilympiad's feature to monitor time spent out of the test environment, when appropriate. This is to determine whether students are accessing unauthorized sites.
    - Exceptions (at this time): Astronomy, Protein Modeling, Experimental Design, Game On.
    - The Event Supervisor will make final decisions for penalties for teams whose *combined* time spent out of the test tab exceeds **one minute.** Penalties shall be no less than a tiered ranking at regional; with possible DQ at state. If a competitor accidentally leaves the test tab, he/she should let the supervisor know ASAP.

General Accommodations

- Teams will compete against one another no matter whether they are **testing in-person or at home**. No distinction will be made between scores.
- Tests will be administered through the Scilympiad platform, so all tests will require access to a computer with a stable Internet connection (or two).
    - One test per team will be submitted in either school or home testing formats.
    - Competitors may communicate with **their partner** through any means (i.e. they are not restricted to Scilympiad chat).
- **[CHANGED 12/19]** Competitors may access *any* **printed** resources, i.e., they are not limited to the restrictions placed in the rules (e.g such as a single 8.5x11" note sheet).
    - However, competitors are not allowed to talk to anyone besides their partner.
    - Tests will be prepared with this modification in mind.
- Competitors will not be responsible for utilizing any lab equipment, including a salinometer.
    - Questions may be asked about function and application of lab equipment.
    - Pictures may be incorporated in lab events.
    - Tests will incorporate dry lab data and/or virtual labs.

Individual Event Modifications

If an event is not listed, it does not [yet] have any specific modifications and the rules – as stated in published national rules or event rules posted in this document – will be followed.

Chemistry Lab (C)

What must be modified: ***How teams demonstrate hands-on knowledge in lieu of a wet lab***
Teams may be asked to:
- Interpret preset data using words, pictures, diagrams.
- Visit a virtual site to test an idea.
  - https://chemdemos.uoregon.edu/demos/Acid-Base-Titration-Computer-Simulation#
  - http://introchem.chem.okstate.edu/DCICLA/acid_base.html
- Describe method(s) by which they would perform or set up a scenario.
- Observe a recorded set up by the supervisor and describe results.

Remainder of the event to run in a test format.

Circuit Lab (B/C)

What must be modified: ***How teams demonstrate hands-on knowledge about circuitry***
Teams may be asked to:
- Interpret preset data using words, pictures, diagrams.
- Visit a virtual site to test an idea. Examples (others may be used):
  - https://phet.colorado.edu/sims/html/circuit-construction-kit-dc-virtual-lab/latest/circuit-construction-kit-dc-virtual-lab_en.html
- Describe method(s) by which they would perform or set up a scenario.
- Observe a recorded set-up by the supervisor and describe results.

Remainder of the event to run in a test format.

Code Analysis (C)

[Replaces Detector Building (C)]
- Participants follow Science Olympiad rules for Code Analysis at: https://www.soinc.org/sites/default/files/uploaded_files/Code_Analysis_091918.pdf. Events will be scored regularly (e.g., not a WSO trial event).
- **[NEW 12/19]:** Rule 2.f is expanded to add: *(iii) Free-response conceptual questions about coding principles*; and *(iv) Competitors will submit Java code to provide a solution to a problem presented by the test*.

Codebusters (C)

- Participants follow 2020-21 Science Olympiad rules for Codebusters.
- **[CHANGED 12/19]:** The Sci Olympiad Codebusters test format will be used. The timer will be enforced. The timed question and associated bonus will not be given due to inconsistencies with the Scilympiad platform at this time.

Crime Busters (B) / Forensics (C)

What must be modified: ***How teams elicit data for qualitative analysis***
Teams may be asked to:
- Interpret preset data.
- Describe methods by which they would perform a given test.
- Observe a recorded set up by the supervisor and describe results.

Remainder of the event to run in a test format.

Density Lab (B)

What must be modified: ***How students will demonstrate ability to measure density.***
Teams will:
- Send a readable picture of the designed set-up to judge in advance of the competition.

Teams may be asked to:
- Describe materials & how they would perform the test.
- Set up an actual trial run demonstrating the requested density scenario.
- Observe a recorded set up by the supervisor and describe results.

Remainder of the event to run in a test format.

Digital Structures (B/C):

[Replaces Boomilever (B / C)]
- Participants follow Science Olympiad rules for Digital Structures at: https://www.soinc.org/sites/default/files/uploaded_files/DigitalStructures.pdf. Events will be scored regularly (e.g., not a WSO trial event).
- Teams are required to purchase a SkyCiv software license ($50/team - good for 8 months) in order to compete. For purchase information see: https://platform.skyciv.com/checkout?product=science-olympiad-ec.

Experimental Design (B/C)

Teams will be asked to follow the guidelines of Experimental Design.
- **[CHANGED 12/19]:** The Event Supervisor will prepare a Google Doc template. Teams will copy doc and modify/complete. Teams will submit hand-drawn graphs, tables, and statistics in this doc. An additional five minutes will be given to upload images and submit *only*.
- **[REMOVED 12/19]:** ~~Teams will email Part I to supervisors PRIOR to receiving Part II.~~
- **[ANNOUNCED 12/19]:** Updating 11/6/20 info:
  - Teams should create an Experimental Design kit containing the following materials. They will be given a subset of these materials to use on competition day, which are the only materials allowed.
  - Materials list: 5 cups, 10+ pennies, 10+ paper clips, 5 balloons, salt, sugar, water source, index cards, paper, rubber bands, string, roll masking tape, book(s)/board, spoon, popsicle sticks, marbles, gummy bears (or similar candy), scissors, red/ yellow/blue crayons, 6-sided dice, pencils/pen, linear measuring device (e.g. ruler), stopwatch.

Event will be run in the traditional test format.

Food Science (B)

What must be modified: **Salinity/pickle test**
Teams will:
- Send a readable picture of the designed set-up to judge in advance of the competition.

Teams may be asked to:
- Describe materials & how they would perform the test.
- Set up an actual trial run demonstrating details of a given scenario.
- Observe a recorded set up by the supervisor and describe results.

Remainder of the event to run in a test format.

Forensics (C)

- See "Crime Busters (B) / Forensics (C)"

Game On (B)

Event will run using https://scratch.mit.edu/
- Event Supervisor may require an adult proctor to be present at time of the event.
- Students may be expected to send game file to the Event Supervisor.

Gravity Vehicle (C)

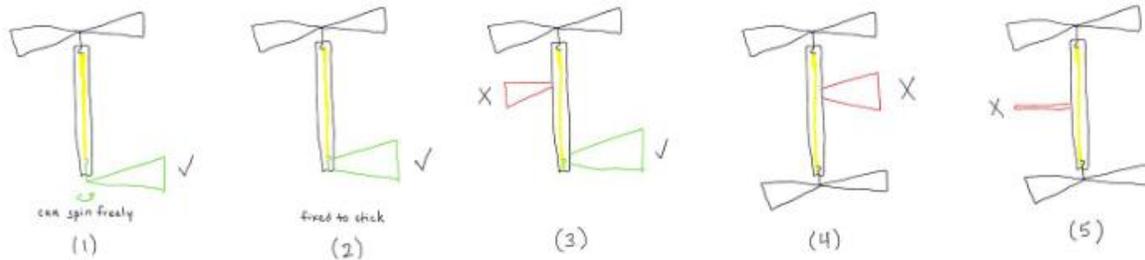- See "Mousetrap Vehicle (B) / Gravity Vehicle (C)"

Helicopter (B/C)

[Replaces Elastic Launched Glider (B) and Wright Stuff (C)]
Video Call sign-up.
- Participants follow Science Olympiad rules for Helicopter at:
  https://www.soinc.org/sites/default/files/uploaded_files/HelicoptersBC.pdf. Events will be
  scored regularly (e.g., not a WSO trial event).
- Participants must use a ceiling that is between 8-10 feet in height.
- An adult must verify helicopter design dimensions for Event Supervisor with a ruler or other
  appropriate measuring device.
- **[CLARIFICATION 12/19]:** (1) If the rotor can spin freely and is powered by a rubber motor,
  this qualifies as a single-bladed rotor. (2) If the rotor and hook are fixed to the stick, this
  also qualifies as a single-bladed rotor. (3) However, only one such blade in (2) will count,
  so any additional single blades do NOT qualify as a single-bladed rotor. (4) A blade
  attached to a helicopter with a rubber motor powering free-spinning rotors does NOT
  qualify as a single-bladed rotor. (5) A random object like a stick attached to a motor stick
  does NOT qualify as a single-bladed rotor.

(continued next page)

can spin freely (1) | fixed to stick (2) | (3) | (4) | (5)

- Participants (or Coach) must submit the following prior to the competition:
  - Readable Flight Log as identified in Device Documentation - instructions provided by Tournament Director or Event Supervisor.

  At Home Accommodation:
  - Both students may log into the video call separately.
  - An adult may assist one student by holding the helicopter while it is being set up and by recording the video call.

Machines (B/C)

Video Call sign-up PLUS written test (all test 8AM Day 2).
- Participants follow 2020-21 Science Olympiad rules for Machines.
- An adult must verify design requirements for Event Supervisor with a meter stick or other appropriate measuring device.
- Participants must be able to answer questions about the construction of their lever device, explain how it is used to determine the ratio difference between two weights.
- Participants may be asked about the scientific concepts that allow their lever arm to function.
- Participants will be asked to demonstrate its function with 2 different weights in the range(s) provided by the rules.
- Participants (or Coach) must submit the following:
  - Readable Charts as identified in Device Documentation - instructions provided by Tournament Director or Event Supervisor.

  Scoring Modifications: Event Supervisor may modify the scoring rubric for this event. Teams will be provided with rubric at least one month prior to the tournament.

  At Home Accommodation:
  - Both students may log into the video call separately. Only one student needs to be present with the lever arm.
  - An adult may assist one student by holding the camera during the video call.

Mission Possible (B)

Video Call sign-up.
- Participants follow 2020-21 Science Olympiad rules for Mission Possible.
- Participants (or Coach) must submit the following:
  - Readable Action Sequence List (ASL) as identified in Device Documentation - instructions provided by Tournament Director or Event Supervisor.
    - Each action must additionally include at least 1 close-up picture with dimensions for each action sequence to receive credit.
- An adult must verify design requirements for the Event Supervisor with a ruler and meter stick or other appropriate measuring device (after the run is completed).
- Event Supervisors will use their best judgement, including close-up pictures submitted from the ASL, to determine if an action occurs that is not clearly visible in the video call.

  Scoring Modifications: Event Supervisor may request all teams start video call with a fully prepared device 'ready to run'. If so, all teams will receive 50 points for <30 minute setup bonus.

  At Home Accommodation:
  - Both students may log into the video call separately.
  - An adult may assist one student by recording the video call.

Mousetrap Vehicle (B) / Gravity Vehicle (C)

Video Call sign-up.
- Participants follow 2020-21 Science Olympiad rules for Mousetrap Vehicle/Gravity Vehicle.
- Participants must set up a track (see 6.a-d).
- Target distance will be provided the day before the tournament.
- An adult must verify design requirements and distance scores for Event Supervisor with a ruler and meter stick or measuring tape or other appropriate measuring device.
- **[NEW 12/19]:**
  - In order to accommodate at-home competition, distances will be limited to **6-8 m**.
  - Event Supervisor will use intervals of 25 cm at regional tournament and 5 cm at state tournament.
- Participants (or Coach) must submit the following:
  - Readable Practice Log as identified in Device Documentation - instructions provided by Tournament Director or Event Supervisor.

  At Home Accommodation:
  - Both students may log into the video call separately.
  - An adult may assist 1 student by holding the vehicle while it is being calibrated and recording the video call.

Ornithology (B/C)

- Competitors will be tested on bird calls only at state. Format to be announced by April 1, 2021.

Protein Modeling (C)

Video Call sign-up PLUS written test (all test 8AM Day 2).
- Participants follow 2020-21 Science Olympiad rules for Protein Modeling.
- Participants (or Coach) will submit the following prior to the tournament:
  - Viewable pictures of model as identified in Device Documentation - instructions provided by Tournament Director or Event Supervisor.
    - Top view with ruler.
    - Side view x 4 with ruler.
    - Orthogonal view from one of top corners.
- During video call, participants must have their model and notecard. Participants must answer the following from their 4in x 6in notecard:
  - What protein is displayed?
  - How is it displayed?
  - Why is the protein important?
- An adult may be asked to verify requirements or move the model by direction of the Event Supervisor.
- For the written test, Event Supervisors are encouraged to use static images from Jmol rather than requiring students to use the program in real time.

  At Home Accommodation:
  - All students may log into the video call separately. Only one student needs to be present with the model. Each student may have their own (identical) notecard.
  - An adult may assist one student by holding the camera during the video call.

Sounds of Music (C)

Video submission PLUS written test.
- Participants follow 2020-21 Science Olympiad rules for Sounds of Music.
- Participants (or Coach) must submit the following:
  - Viewable video as identified in Device Documentation - instructions provided by Tournament Director or Event Supervisor. Video to include:
    - Dimensions of instrument.
    - Scale (participants must indicate which scale and starting note).
    - Required song excerpt.
    - Video may include:
      - Optional Bonus Pitch (participants must indicate which pitch)
  - No live video calls are required for Sounds of Music.
- Event Supervisors will utilize the Tuning App: Pitch (by FrozenApe) to test the quality of pitches on video.

  At Home Accommodation:
  - An adult may assist a student by recording the video.

Trajectory (B/C)

[Replaces Ping Pong Parachute (B / C)]
Video Call sign-up.

- Participants follow Science Olympiad rules for Trajectory at:
  https://washingtonscienceolympiad.com/tournaments/2021_trajectory_B-C. Events will be scored regularly (e.g., not a WSO trial event).
- An adult must verify design requirements for Event Supervisor with a meter stick or other appropriate measuring device.
- Participants (or Coach) must submit the following:
  - Readable Design Log as identified in Device Documentation - instructions provided by Tournament Director or Event Supervisor.
- Participants must set up a competition area. It may be on a flat outside surface if an indoor surface is not available (6.a-f).
  - Cardboard recommended under sand, 25-50 lb sand/kitty litter, 1m x 1m target area, 5 gallon bucket, taped launch area, tape measure.
  - **[NEW 12/19]:** In order to accommodate hallways, the targets and bucket will not be placed more than 50 cm to either side of the midline.
- **Regional Tournament:** Event Supervisors will not use elevated targets. Participants should be able to easily move the target to the announced distance.
- **State Tournament: [CHANGED 12/19]:** Event supervisors will not use elevated targets.

  At Home Accommodation:
  - Both students may log into the video call separately.
  - An adult may assist one student by setting up the target and recording the video call.

Water Quality (B/C)

What must be modified: **Salinity Test**:

- Participants (or Coach) will send:
  - Viewable picture of salinometer set-up to judge in advance of the competition.
- Teams may be asked to:
  - Describe salinometer & how they would perform the test.
  - Set up an actual trial run demonstrating details of a given scenario.
  - Observe a set-up by the supervisor and describe results.

Remainder of the event to run in a test format.

Write It, CAD It (B/C)

Participants follow Science Olympiad rules for Write It CAD It at:
https://www.soinc.org/sites/default/files/uploaded_files/WriteItCadIt.pdf. The event will be scored regularly (e.g., not a WSO trial event).
All tournaments will use: https://www.tinkercad.com/

- Proctor will send a set of images: top/bottom/front/back/side views to the writer.
- Within 25 minutes, writer will email written description file to both Event Supervisor and CAD'er.
- At that time the Event Supervisor will send the CAD platform to CAD er.
- **Students must NOT communicate directly with each other.**
- Event Supervisor may require an adult proctor.