Camas Invitational Event Rules and Guidelines

Revision Logs

[12/10/2020] Add Write-It-CAD-It clarification. Updated due date for Mission Possible ASL and Protein Model report.

[12/8/2020] Add Write-It-CAD-It clarification, and submission form for write-up document, and for final CAD files.

[12/7/2020] Code Buster (add timed question)

[12/6/2020] Minor correction to Mission Possible ASL log submission guide, submission link table, Astronomy, and tips for smooth competition day

[12/5/2020] Updated note to Coaches, students (include glance of submission method); revised Experimental Design guidance.

[12/5/2020] Added some tips for students for better tournament day experience

[11/18/2020] Event schedule updated (increase break to 20min between events; Signup events updated; Resource guide updated
               Updated Experimental Design rule and upload links; changed the WiCADi tool and submission method for B and C.

[11/17/2020] Added Helicopter event description and submission links. Protein Modeling submission form updated.

[11/13/2020] Experimental Design event format decided

[11/12/2020] Mission submission link updated; Protein upload date updated

Notes to Coaches and Students

Communication and Resource Guide

Communications between students: Students are allowed to communicate with and only with their partners on the particular event using the Scilympiad chat box, and/or by video, phone, and other remote communication methods. The participants shall **not** be in the same room (**no in-person gathering *with those outside the individual's household* is allowed**).

Resource (General): For all events, each partner should have his/her own printed resource binder, field guides, and/or note sheets as permitted by the rules for each individual event. These binders, field guides, and/or note sheets need **not** be identical.

Resource (Binder event): In case the printing of binder presents a difficulty to students, we allow students in binder events to use a digital source as long as its content would fit in the size rule if printed, and that it is locally saved on the computer (e.g. Google offline mode). These binder events, and events with computer usage or computer exploration (Astronomy, Protein modeling, GameOn) do not require students to stay in the scilympiad browser window. We rely on the honor code (don't take unfair advantage of your peers)!

Resource (Non-Binder event): For events that require less than 4 pages of notes, we strongly recommend you have your own printed version rather than digital copy. The rule again will be Honor-Code based. If a student has special circumstances that prevent them from printing out the notes, please do honor the same size limit when using the digital equivalent of your notes.

For CodeBuster, **stay in the scilympiad browser window.**

Event Change and Submission Requirements

Submission of Builds Logs: We will require early submission of logs for two events (turn in on Thursday, Dec 10th)
- **C-division: Protein Modeling** (design document with pictures of build),
- **B-division: Mission Possible** (Readable ASL and pictures).

Submission forms will still be accepted till competition day, but teams with late submission may be penalized accordingly, per event supervisors' judgement.

Write-It-CAD-It teams also need to share emails with the Event supervisor <u>at least one day before the competition</u>. See below for details.

For your convenience, here is a glance of all events that have submission links or requirements. Make sure you know how Google doc works and turn sharing on if the requirement is to submit a link. Remember your team number (B teams, C teams) as most submissions require you to input that information. If you have any issues with the submission process, please work with your coaches! Additional submission requirements or options may be given by Supervisors at the competition time.

B events	Submission link
Digital Structures	SkyCiv; Select "Camas HS Invitational" at submission before end of time block
Experimental Design	https://forms.gle/S7yRy6aFy9PV9PSN8 5 minutes after the end of time block
Game On	https://forms.gle/kv4ZY8wrXBcKmECn8 at end of time block
Helicopters	https://forms.gle/y2jvSEVXuNEicYbo9 at end of time block
Mission Possible	ASL log: https://forms.gle/YRf7csAorrR3zBTT7 Video: https://forms.gle/2UEVJa5r9UKxGgEi6
Write It CAD It*	Email address **(by 12/11)** https://forms.gle/dB87nKcWmjGfH2BX7 Write-up: https://forms.gle/MnGi2jSb93t5G6Sk7 CAD file: https://forms.gle/PdQ6xkhYivgphXo56

C events	Submission link
Astronomy (optional)	https://forms.gle/kz7dHE8u8zXsWyGr6 within 15 min post-test for math work
Digital Structures	SkyCiv; Select "Camas HS Invitational" at submission before end of time block
Experimental Design	https://forms.gle/EQnARtvBkCHdH4sz7 within 5 min after end of time block
Helicopters	https://forms.gle/sdSX6nAbnfyAmDcs8 at end of time block
Protein Modeling*	https://forms.gle/ZLYqw3MrGrvUtFFD8 **by 12/10**
Write It CAD It*	Email address **(by 12/11)** https://forms.gle/dB87nKcWmjGfH2BX7 Write-up: https://forms.gle/2CEnVsUmeTpuwZ2c9 CAD file: https://forms.gle/XVizCxqCxsgc3eMT9

Event Supervisor Availability

For self-scheduled events, there will be no supervisor available. Please follow the instructions in the scilympiad, taking the test as-is. Contact your coaches if needed. All other events should have a supervisor in the "classroom" chat box to answer your questions.

Tips for a Smooth Competition Day

1. Students should set up their account and test their loginID (from Coaches) days ahead of the tournament. Once you login, you should be able to see the events you have been assigned, if the team roster and assignments are complete. Notify your coach if there is any inconsistency. You can also click the test that has hyperlinks, which gives you the instruction page that the event supervisor has designed.
2. In the scilympiad classroom, you will be able to use a chat box to communicate with your partner, and a separate box to ask questions to the event supervisor (for the fixed-schedule events).
3. Students are strongly encouraged to use the loginID rather than email for signup and especially for competition day. There are cases where students were timed out when using email for login, or have issues with submission and answer sync between partners. If students encounter such issues, they should try to log off, and log in again (using their loginID). Usually this resolves the sync and timeout issues.
4. The server automatically saves your answer periodically, so don't worry if you are timed-out or kicked out of the test for some reason. You are encouraged to work with your partner so that you do not edit the same answer box simultaneously. The autosave is based on mouse action, any click from inside to the outside of the text box will trigger a server autosave, so your answer should be saved based on the last click.
5. If you are locked out of a test, and you cannot sign-in again, send a note to your coach and ask your partner to notify the supervisor in the chat box. If the issue persists, you can also record the last few answers in a separate way, picture/notes, before you log off, so that you can recover the last answer not saved by the system. The coach can contact tournament directors to report the issue with team number, event, and time when the issue occurred. Some common causes are
   ○ Students using email rather than recommended loginID approach
   ○ Student using non-Chrome browsers (e.g. student reporting synch issue using Safari browser on Apple product)
   ○ Student may have WiFi issues or school-governed network firewalls
   ○ Not have Javascript or your computer (uncommon), or not have the correct clock or time zone
   ○ Students using iPad and other tablets, computers in tablet mode, or phones and devices to take the test.
   The event supervisor will try to accommodate, but please understand that they have limited power with many of such issues. Be prepared to work with your partners who still have access and coordinate your answers.
6. When the test period is up (50minutes), the server should automatically submit your test.
7. Contact your coach if you have trouble accessing embedded files.

Camas B and C Event Schedules

Camas Invite will follow State rules but will adopt a schedule that closely matches with National time block conflicts.

December 12, 2020	Pacific time zone				
Division B					
8:00 AM - 8:50 AM	**9:10 AM - 10:00 AM**	**10:20 AM - 11:10 AM**	**11:30 AM - 12:20 PM**	**1:00 PM - 1:50 PM**	**2:10 PM - 3:00 PM**
Crime Busters	Disease Detectives	Food Science	Anatomy & Physiology	Dynamic Planet	Density Lab
Experimental Design*	Meteorology	Reach for the Stars	Circuit Lab	Heredity	Fossils
Ornithology	Write It CAD It*	Solar Power (trial)	Road Scholar	Machines	Water Quality
Self-scheduled events: **Environmental Chemistry** (trial), **Digital Structures** (trial), **Game On, Helicopters,** and **Mission Possible**					
Division C					
8:00 AM - 8:50 AM	**9:10 AM - 10:00 AM**	**10:20 AM - 11:10 AM**	**11:30 AM - 12:20 PM**	**1:00 PM - 1:50 PM**	**2:10 PM - 3:00 PM**
Anatomy & Physiology	Forensics	Codebusters	Chem Lab	Experimental Design*	Machines
Astronomy	Fossils	Disease Detectives	Designer Genes	GeoLogic Mapping	Protein Modeling*
Circuit Lab	Write It CAD It*	Ornithology	Dynamic Planet	Code Analysis (trial)	Water Quality
Self-scheduled events: **Detector Building**, **Digital Structures** (trial), **Environmental Chemistry**, **Helicopters**, and **Sound of Music**					
* Event with significant rule modifications for Camas Invite, or unique WA events - consult the event modification guide below					

Division B - Event Modifications

Anatomy & Physiology B: No change.

Circuit Lab B: No hands-on component. Written test only.

Crime Busters B: No hands-on component. Students will be provided with laboratory test results. Written test only

Density Lab B: No hands-on component. Written test only.

Digital Structures B: Trial event Please see [Digital Structures Rules](#)
- [Here](#) is a short tutorial on SkyCiv
- Here is an event supervisor's review of [BearSo](#) that is very useful for all competitors.
- **If your students do not yet have a SkyCiv account, you will need to purchase a student account or team account (accommodate 2-5 students) for $50, with up to 8 month.** Go to:
    - https://skyciv.com/olympiad/#host-invitational
    - Click "Get Started Today"
    - Create your team/school's account.
    - Then follow the instructions in the YouTube video to turn on the Science Olympiad app in SkyCiv and start building and testing boomilever structures using the SkyCiv modeling and structural analysis software.

- Participants should log into scilympiad's Digital Structures event and start the test to see the unknown contact depth and contact width. Teams must submit their design on SkyCiv within 45 minutes of them starting the test. **Details for submission will be provided on the day of the tournament via Scilympiad.**
- Participants will need to turn on Competition Mode on tournament day in order to submit their structure. Once in Competition Mode, previously built structures cannot be imported, participants are locked into the mode for 48 hours and they can only test their structure 5 times.
- Teams should use area load and members must be rectangular cross section made from one of the 3 presets balsa materials
- Since only one partner can use the model in SkyCiv, the person making the model can share screen and/or video chat outside of scilympiad.com with their partner.
- **Again you (or your team) will need to have your own account for SkyCiv to participate.**

Disease Detectives B: No change.

Dynamic Planet B: No change.

Environmental Chemistry (Trial): WA state trial rules - B

Experimental Design B: Traditional Experimental Design Approach

Teams will be asked to follow the guidelines of Experimental Design and work in parallel on a shared document and conductor experiment at home. Team will need to prepare the following supplies ahead of time:

○ 5 cups, 10+ pennies, 10+ paper clips, 5 balloons, salt, sugar, water source, index cards, paper, rubber bands, string, roll masking tape, a linear measuring device, and timer.

At the event time block:
- Teams will use Scilympiad to get the instructions for the experiment, and the material list
  - The material list might include a linear measuring device as well as a timer. Only the materials listed on the experiment are allowed to be used so that if a timer is not listed, then no timer is allowed.
- Team will conduct experiments using their own supplies and work in parallel on a shared document, e.g. Google Docs. Experiments can be done by a designated person, or by the group. Students are encouraged to collaborate using any methods allowed in the general guideline.
- For the first 20 minutes, teams will use Scilympiad to complete Part I as a group.
- The event supervisor will provide a template at the 20min mark in Scilympiad to allow students to make a local copy. Name your Document titled "[TEAM NUMBER] - [TEAM NAME] CamasInvite Experimental Design B"
- This document will be formed for Part-II data analysis and diagram/quantitative data section for Part-I. Students shall use this template for inclusion of any Part-I diagram/data table, and add description that does not get captured in the scilympiad.com platform format. Sample data include but not limited to
  - Picture(s) of procedure diagram(s) (from part I)
  - Data Table or pictures (from part I)
  - Data Graph (picture or Google sheet plots)
- Teams will continue to have access to Scilympiad and will be able to continue work on Part-I in Scilympiad.
- At the end of 50 minutes, the team shall submit the link to the experimental design document to the event supervisor using this form **https://forms.gle/S7yRy6aFy9PV9PSN8 (make sure the link sharing is on for your Google doc)**.
- Students can also choose to use Word, PDF as the file format, and upload the document using the same link.

Food Science B: No hands-on component. Written test only.
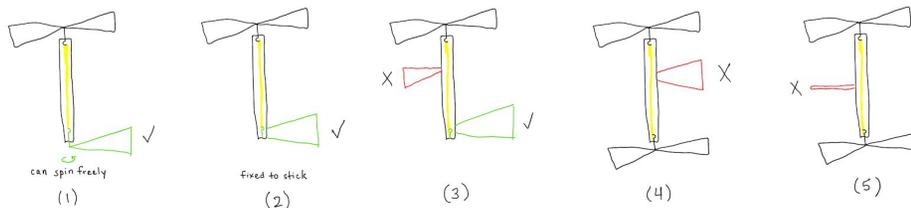

Fossils B: No change.

Game On B:
- Each team should create a single login for both partners so that they can both access a single file. Note that while both partners can be logged into the account at the same time, Scratch does not save the files properly if both partners are in the project at the same time. Participants should communicate with their partner (through Scilympiad, phone, or other means) to let each other know who is actively working on the file to avoid version conflicts.
- Participants can share screen, audio, and/or video chat outside of scilympiad.com with their partner.
- At the beginning of the sign-up block, students shall access the Game topic and submission direction from scilympiad.com/wa-camas/ and follow the instructions therein.

- More detailed instructions will be added to this document with submission and account setup.
    -

Helicopter Please see [Helicopter Rules]
- There must be an adult present with the participant(s) competing during the entire duration of the recording. The adult from the team being in the same room as the participant(s) is strongly recommended. Otherwise, an adult with the team must be available during video call during the entire duration of the call. The student participant must launch the device on their own, but the adult present can help hold the device while the student winds their motor.
- With coach or parent supervision, teams will follow the instructions in the rules and test their Helicopter in a typical room (ceiling ~ 2.5 m or 8 ft) at home on tournament day. Results must be reported by the time of the last event by submitting the following to **https://forms.gle/y2jvSEVXuNEicYbo9**

  - Duration of Flight 1 (in seconds)
  - # of single-bladed rotor for the device used in Flight 1
  - Duration of Flight 2 (in seconds)
  - # of single-bladed rotor for the device used in Flight 2
  - **Flight Log and helicopter spec documentation.**
  - Video of each flight

- At the beginning of the scheduled time block, a unique word will be shared on the event test page. Teams should write this word on a piece of paper and the video recording of the flight must include this piece of paper with the word. This is to help certify that the recording of the flight is made on the day of the tournament. Alternatively the video can start with a screenshot of the code word at scilympiad.com test site, and continuously filming the helicopter run onward.
- Clarification regarding the single rotor bonus:

(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
- The adult with the participant may help hold the device to allow the participant to wind the motor.

Heredity B: No change

Machines B: No hands-on component. No device testing. Written test only.

Meteorology B: No change

Mission Possible B: The Mission Possible B rules in the 2020-2021 Rules will be used with the following changes:

- Prior to the tournament at all tournament levels, teams must submit their ASL along with pictures of each action **by Wed, Dec 9th,** in order to receive the 25 points for 5.b.i. See detailed instructions below.
- 4.a. is modified as "The Target Operation Time is 45 to 75 seconds at Regionals/Invitationals, **61 to 90 seconds at State**, and 91 to 120 seconds at Nationals. At the start of the assigned time, Event Supervisors will provide the participant(s) the Target Operation Time."
- The participant(s) or adult is/are responsible for pointing their recording device so that the Event Supervisors are able to see the running of the Mission Possible device. Event Supervisors will use their discretion to determine the success of an action in the case that it is not visible through the video.

    Camas Invitational target time: Time will be within range of State rules. You will get the exact target when you start the test on scilympiad and get your codeword.

a. **ASL submission by ~~Wed, Dec 9th~~ Thursday, Dec 10th**
- The ASL should be submitted at or before 11:59 PM local time ~~Wed, Dec 9th~~ **Thursday, Dec 10th** at **https://forms.gle/YRf7csAorrR3zBTT7**

- Teams must submit pictures of their device with appropriate measurement tools included to verify all measurements required in the rules. It is recommended that each action must include at least 1 close-up picture with dimensions to receive full credit.
- *Submissions after 12/10 midnight PT will be considered late and will not get the 25 points from part 5.b.i. If you are unable to submit by this time and want to be eligible for the 75 points outlined in 5.b.ii-5.b.iv, you must submit before your scheduled block.*
- It is the responsibility of the student participant(s) to ensure that their device complies with all required measurements and construction parameters as evidenced by the pictures submitted to the event supervisor.
- To submit the ASL and images to the form link above, please create a Google Document titled "[TEAM NUMBER] - [TEAM NAME] CamasInvite Mission Possible B" with ASL and insert one image on each subsequent page and include a title for each image. ~~It is crucial that you turn LINK SHARING ON for this document so that when the time comes, we are able to view your document. Teams without link sharing turned on may result in a construction violation.~~

- An Action Sequence List (ASL) must be submitted with their completed event checklist and match video taken on the day of competition for full credit.
- The contact information shall be included in this submission in case tournament supervisors may need to contact the team.

b. **Day of competition**
- An adult must be present with the participant(s) during the entire duration of the recording. The student participant must set up and run the device on their own.
    1) Open the test in Scilympiad to obtain the target time and codeword;
    2) Completing your run: Participants have up to 30 minutes to set up their device and then immediately start their device.
    3) The video recording should begin with a screenshot of the Scilympiad test page with the target time and codeword (0 minute mark)
    4) After the completion of the action, the team has 30 minutes to upload their video recording to a file hosting software (Google Drive, Google Photos, Dropbox, etc.) and submit the video link to
         https://forms.gle/2UEVJa5r9UKxGgEi6
       (make sure file sharing is on, **note this form is different from ASL submission**).
    5) They may not perform additional runs during the submission period.

- The participant(s) is/are responsible for pointing their recording device(s) so that the Event Supervisors are able to see the running of the Mission Possible device while the video is being made. Event Supervisors will use their discretion to determine the success of an action in the case that it is not visible through the video and/or may contact the participant(s).
- Tournament officials may need to contact the participant(s) the day of the tournament to address any issues or concerns.

Ornithology B: No change.

Reach for the Stars B: No change.

Road Scholar B: No change. You will not be required to draw on a map.

Solar Power B: Trial Event. Please see Solar Power Rules.
- No hands-on component. No device testing. Written test only.

Water Quality B: No hands-on component (no salinometer). Written test only.

Write It, CAD It B: Please see Write It, CAD It Rules

- Our WA tournaments will use: https://www.tinkercad.com/ (You can create a personal account for free).

- For the competition, the event supervisor will email all of the writers at the beginning of the hour a set of images: top/bottom/front/back/side views. Writers can use any word processing software (e.g. Microsoft Word, notepad, etc.) When the writer has completed their instructions, they should email only the instruction document to their partner (CAD'er).
- The same document should be uploaded via Google form to the event supervisor. This should be done by the 25 minute mark. The document should be named "[TEAM NUMBER] - [TEAM NAME] CamasInvite WiCADi" to help ES identify the teams easily. Write-up upload link: **https://forms.gle/MnGi2jSb93t5G6Sk7**

- **All Writers and CADer email addresses shared with Event Supervisor by Friday morning, Dec 11th, through this form: https://forms.gle/dB87nKcWmjGfH2BX7** (you can add your coach's email as contact email)

- Event supervisor will announce before the day whether a CAD file with scrambled pieces will be sent to CADers. If so, this will occur between 25 minute-30min after the beginning of the block.

- When the CAD'er is done, they should immediately share the CAD file (format TBD) with the Event Supervisor through Google Form (time of the construction phase is used as a tiebreaker).
   https://forms.gle/PdQ6xkhYivgphXo56

- If the parents and/or school do not allow student email addresses to be shared with the Event Supervisor, the coach is responsible for contacting the tournament director, such that they can send the files to/sharing them with the student and sharing them back with the Event Supervisor.

- Scilympiad.com test site usage:
   - **Writers** can start the test at the beginning of the time block and access it till the 20min mark, if they need to use the chat box feature to contact the event supervisor. They should not use the chat box with partners as the only communication between partners should be the instruction document sent at the 25 minute mark.
   - **CADers** can access the test at the 25min mark till the end of the block, if they need to use the chat box feature to contact the event supervisor. They should not use the chat box with partners. Supervisor may choose the classroom chat or scilympiad.com platform to provide the CAD file with scrambled pieces if they decide to do so.

Division C - Event Modifications

Anatomy & Physiology C: No change.

Astronomy C: No change.
   [12/6/2020]   For the math problems, if the student feels comfortable sharing their work (on paper) for the math questions, they can upload their work in PDF, picture, or Google doc format after the test completion. The upload window is between test block end and 15 minutes after. The link for upload is https://forms.gle/kz7dHE8u8zXsWyGr6 More detailed instructions given in the test.

Chemistry Lab C: No hands-on component. Written test only.

Circuit Lab C: No hands-on component. Written test only.

Code Analysis C: Washington event (Trial for Camas Invite)
   ● Please see Code Analysis Rules (WI State 2021 rules with adjustment for MiniSO format)

Codebusters C:
   - Print reference document ahead of competition (available in the test window once you login for this event).
   - First question will be a timed question.

Designer Genes C: No change

Detector Building C: No hands-on component, no device testing, nor design log required. Written test only.

Digital Structures C: Please see [Digital Structures Rules](#) (Following BearSO BKM)
- [Here](#) is a short tutorial on SkyCiv
- Here is an event supervisor's review of [BearSo](#) that is very useful for all competitors.
- **If your students do not yet have a SkyCiv account, you will need to purchase a student account or team account (accommodate 2-5 students) for $50, with up to 8 month.** Go to:
    - https://skyciv.com/olympiad/#host-invitational
    - Click "Get Started Today"
    - Create your team/school's account.
    - Then follow the instructions in the YouTube video to turn on the Science Olympiad app in SkyCiv and start building and testing boomilever structures using the SkyCiv modeling and structural analysis software.

- Participants should log into scilympiad's Digital Structures event and start the test to see the unknown contact depth and contact width. Teams must submit their design on SkyCiv within 45 minutes of them starting the test. **Details for submission will be provided on the day of the tournament via Scilympiad.**
- Participants will need to turn on Competition Mode on tournament day in order to submit their structure. Once in Competition Mode, previously built structures cannot be imported, participants are locked into the mode for 48 hours and they can only test their structure 5 times.
- Teams should use area load and members must be rectangular cross section made from one of the 3 presets balsa materials
- Since only one partner can use the model in SkyCiv, the person making the model can share screen and/or video chat outside of scilympiad.com with their partner.

Disease Detectives C: No change.

Dynamic Planet C: No change.

Environmental Chemistry (Trial): [WA state trial rules -**C**](#)

Experimental Design C: Traditional Experimental Design Approach

Teams will be asked to follow the guidelines of Experimental Design and work in parallel on a shared document and conductor experiment at home. Team will need to prepare the following supplies ahead of time:

○ 5 cups, 10+ pennies, 10+ paper clips, 5 balloons, salt, sugar, water source, index cards, paper, rubber bands, string, roll masking tape, a linear measuring device, and timer.

At the event time block:

- Teams will use Scilympiad to get the instructions for the experiment, and the material list
    - The material list might include a linear measuring device as well as a timer. Only the materials listed on the experiment are allowed to be used so that if a timer is not listed, then no timer is allowed.
- Team will conduct experiments using their own supplies and work in parallel on a shared document, e.g. Google Docs. Experiments can be done by a designated person, or by the group. Students are encouraged to collaborate using any methods allowed in the general guideline.
- For the first 20 minutes, teams will use Scilympiad to complete Part I as a group.
- The event supervisor will provide a template at the 20min mark in Scilympiad to allow students to make a local copy. Name your Document titled "[TEAM NUMBER] - [TEAM NAME] CamasInvite Experimental Design C"
- This document will be formed for Part-II data analysis and diagram/quantitative data section for Part-I. Students shall use this template for inclusion of any Part-I diagram/data table, and add description that does not get captured in the scilympiad.com platform format. Sample data include but not limited to
    - Picture(s) of procedure diagram(s) (from part I)
    - Data Table or pictures (from part I)
    - Data Graph (picture or Google sheet plots)
- Teams will continue to have access to Scilympiad and will be able to continue work on Part-I in Scilympiad.

At the end of 50 minutes, the team shall submit the link to the experimental design document to the event supervisor using this form **https://forms.gle/EQnARtvBkCHdH4sz7 (make sure the link sharing is on for your Google doc).**

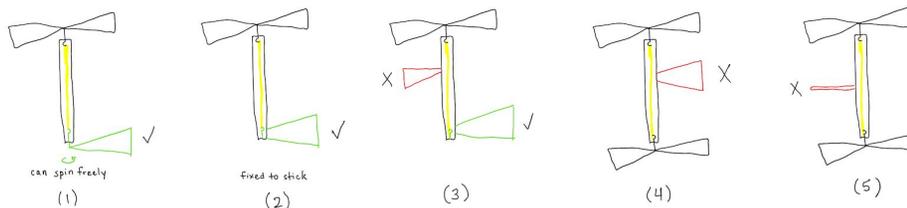- Students can also choose to use Word, PDF as the file format, and upload the document using the same link.

Forensics C: No hands-on component. Students will be provided with laboratory test results. Written test only.

Fossils C: No change.

GeoLogic Mapping C: No change.

Helicopter Please see [Helicopter Rules](#)
- There must be an adult present with the participant(s) competing during the entire duration of the recording. The adult from the team being in the same room as the participant(s) is strongly recommended. Otherwise, an adult with the team must be available during video call during the entire duration of the call. The student participant must launch the device on their own, but the adult present can help hold the device while the student winds their motor.
- With coach or parent supervision, teams will follow the instructions in the rules and test their Helicopter in a typical room (ceiling ~ 2.5 m or 8 ft) at home on tournament day. Results must be reported by the time of the last event by submitting the following to **https://forms.gle/sdSX6nAbnfyAmDcs8** **(make sure the link sharing is on for your video).**

  - Duration of Flight 1 (in seconds)
  - # of single-bladed rotor for the device used in Flight 1
  - Duration of Flight 2 (in seconds)
  - # of single-bladed rotor for the device used in Flight 2
  - Flight Log and helicopter spec documentation.
  - Video of each flight

- At the beginning of the scheduled time block, a unique word will be shared on the event test page. Teams should write this word on a piece of paper and the video recording of the flight must include this piece of paper with the word. This is to help certify that the recording of the flight is made on the day of the tournament. Alternatively the video can start with a screenshot of the code word at scilympiad.com test site, and continuously filming the helicopter run onward.

- Clarification regarding the single rotor bonus:

(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
- The adult with the participant may help hold the device to allow the participant to wind the motor.

Machines C: No hands-on component. No device testing. Written test only.

Ornithology C: No change.

Protein Modeling C: (BearSO approach)
- Each team must submit six separate pictures of the protein, each from a different orientation that we have specified. See this Jmol screenshots (*Credit:Peter Hung and BearSO Protein Supervisors)* depicting the correct orientation to display the protein at.). In addition, if there are any additions, please take a SEPARATE picture of EACH creative addition. Make sure your pictures are taken against a background that contrasts with the color of the protein backbone so that the grader can easily see the protein.
- Such document shall also include at least one measurement reference to verify that the longest dimension of the build is within the National rule requirement.
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- To submit the images, please create a Google Document titled **"[TEAM NUMBER] - [TEAM NAME] CamasInvite Protein Modeling"** and insert one image on each page and include a title for each image. Title the six different orientations using the corresponding numbers in this document, and title each creative addition as "Creative Addition [number]." At the end of the document, insert LEGIBLE images of both sides of your flash card. It is crucial that you turn LINK SHARING ON for this document so that when the time comes, we are able to view your document. Teams without link sharing turned on may result in having zero points on the pre-build portion.
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- Teams must submit their documents **by 11:50PM Pacific time, Wed, Dec 9th,** in order to receive full score: **https://forms.gle/ZLYqw3MrGrvUtFFD8 (make sure the link sharing is on for your document, if sharing a link).**
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- IMPORTANT: In case you have not already done so, please make sure you have Jmol working on your computer BEFORE competition day. You will need to download Jmol and a Java Development Kit if your computer does not already have Java installed, since Jmol is Java based. If you do not have Jmol before your competition period, you will have to waste valuable time downloading the software during the competition. Any version of Jmol is acceptable for use.

Sounds of Music C: No hands-on component. No device testing. Written test only.

Water Quality C: No hands-on component (no salinometer). Written test only.

Write It, CAD It C: Please see [Write It, CAD It Rules](#)

- Our WA tournaments will use: https://www.tinkercad.com/ (You can create a personal account for free).

- For the competition, the event supervisor will email all of the writers at the beginning of the hour a set of images: top/bottom/front/back/side views. Writers can use any word processing software (e.g. Microsoft Word, notepad, etc.) When the writer has completed their instructions, they should email only this instruction document to their partner (CAD'er).

- The same document should be upload via Google form to the event supervisor. This should be done by the 25 minute mark. The document should be named "[TEAM NUMBER] - [TEAM NAME] CamasInvite WiCADi" to help ES identify the teams easily. Write-up upload: **https://forms.gle/2CEnVsUmeTpuwZ2c9**

- **All Writers and CADer email addresses shared with Event Supervisor by Friday morning, Dec 11th, through this form: https://forms.gle/dB87nKcWmjGfH2BX7** (you can add your coach's email as contact email)

- Event supervisor will announce before the competition as to whether a CAD file with scrambled pieces will be sent to CADers. If so, this will occur between 25 minute-30min after the beginning of the block.

- When the CAD'er is done, they should immediately share the CAD file with the Event Supervisor through Google Form (time of the construction phase is used as a tiebreaker).
- CAD file upload: **https://forms.gle/XVizCxqCxsgc3eMT9**

- If the parents and/or school do not allow student email addresses to be shared with the Event Supervisor, the coach is responsible for sending the files to/sharing them with the student and sharing them back with the Event Supervisor.

- Scilympiad.com test site usage:
    - **Writers** can start the test at the beginning of the time block and access it till the 20min mark, if they need to use the chat box feature to contact the event supervisor. They should not use the chat box with partners as the only communication between partners should be the instruction document sent at the 25 minute mark.
    - **CADers** can access the test at the 25min mark till the end of the block, if they need to use the chat box feature to contact the event supervisor. They should not use the chat box with partners. Supervisor may choose the classroom chat or scilympiad.com platform to provide the CAD file with scrambled pieces if they decide to do so.