

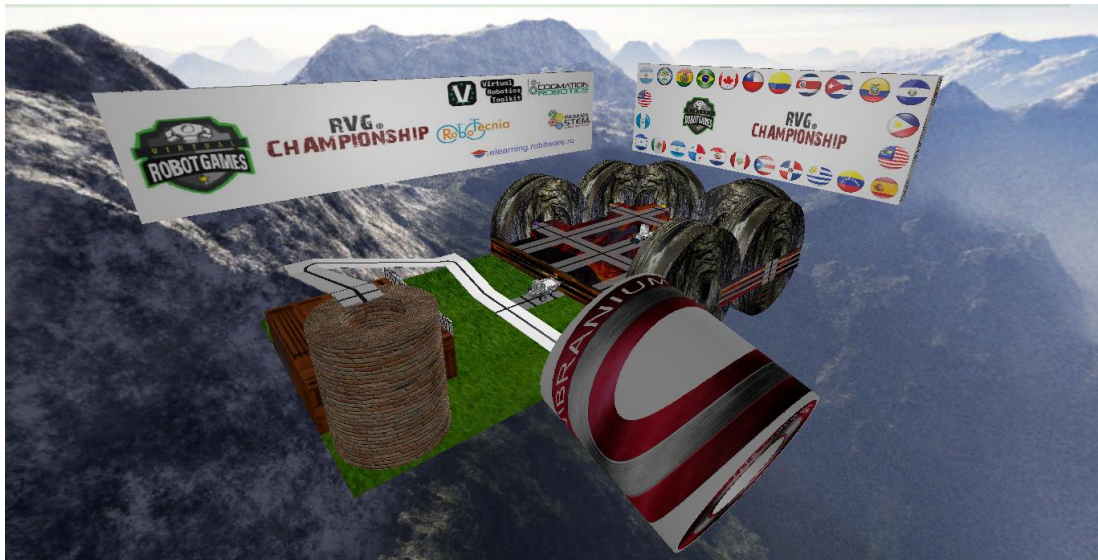


# **RVG** **CHAMPIONSHIP** INTERNATIONAL 2020

**RVG Championship 2020**

**Senior**

**Vibranium Mines**



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## General Rules


1. All teams must consist of just one competitor.
2. The competitor must be from the category age group or younger.
3. The competitor must never be older than the category age group.
4. **It is not allowed to make changes in the environment before, after and during the simulation.**
5. **The only change allowed is import their own robot and turn inside the start area before the simulation starts.**
6. When the simulation starts, the competitor can only use the camera's tools and the scoreboard button.
7. All the tasks need to be solved only by using the code created by the participant for the robot.
8. **In case the Judging Team suspects of the score/time of any competitor, they can request a video or a conference to the participant, to prove how their result was gotten according to the rules and requirements allowed. In case the competitor doesn't accept the video, conference or doesn't prove how the score/time was gotten, the result will be deleted from the ranking.**
9. In all the categories the top 20 must send a video of their robot solving the challenge.
10. In the video, the robot must get the same points as displayed on the leaderboard. The robot's time must be the same as the time on the leaderboard  $\pm$  2 seconds.

In case of any unforeseen circumstances in which the rules have to be altered, the judges will have the final say in the results.

The judges have the utmost authority to amend the rules and regulations.

The judges have the utmost authority to disqualify a result if:

1. Participants pause and resume the simulator in between the code.
2. Participants create any other situations which judges deem unacceptable.

	El Estadio-Elementary	Stairway From Heaven-Elementary	La Cruz- Junior	Chimney- Junior	Los Pozos- Senior	Vibranium Mines- Senior
<b>Age</b>	Max 12 years.	Max 12 years	13-15 years	13-15 years	16-19 years	16-19 years
<b>Robot</b>	It's allowed to import your own robot.					It's not allowed to import your own robot..
<b>Team Size</b>	Only 1 competitor per team					
<b>Official Simulator</b>	Virtual Robotics Toolkit					
<b>Scoring Type</b>	The winner will have the Best Round. The parameters is Lowest Time.		The winner will have the Best Round. The parameters are Best Score and Lowest Time.			
<b>Rounds</b>	The competition consist on 10 rounds, competitors can test as many times as they wants, but they can only can submits results 10 times.					
<b>Software</b>	Open to any control software that can connect to Virtual Robotic Toolkit					

## How to create your video?

You need to record computer screen using Windows 10 Function, QuickTime player, OBS or other option to record screen.

Screen record Windows 10

[https://youtu.be/mVJsm\\_000c0](https://youtu.be/mVJsm_000c0)

Screen record Mac

<https://youtu.be/s9xnsj6ditM>

Screen record OBS

<https://youtu.be/QKmrDUJFRkM>

Install OBS:

<https://obsproject.com/>

The participant must upload the video on YouTube, Vimeo, Google Drive, etc.

How to upload a video on YouTube?

<https://youtu.be/4RZ3FooBKYE>

If you upload your video on YouTube, you have to publish it as Public or Unlisted.

If you sent a Google Drive link please confirm we can have access to the video.

### **Record Details**

-On the video, the participant has to show the robot solving all the challenge. If the video starts after the robot begins solving the challenge or cuts the video before the robot finishes the task, the video will not be valid.

-The robot and the scoreboard must be visible all the time.

-On the video the participant must use "Top Camera" and "Tether" tracking type.

### **Top Camera and Tether tracking type**

1) Need to open Advanced Mode.

To access "Advanced Mode", all you have to do is press "F12" on your keyboard.

Could be:

-F12

-Ctrl+F12

-Fn+F12

-Alt+F12

-Cmd+F12

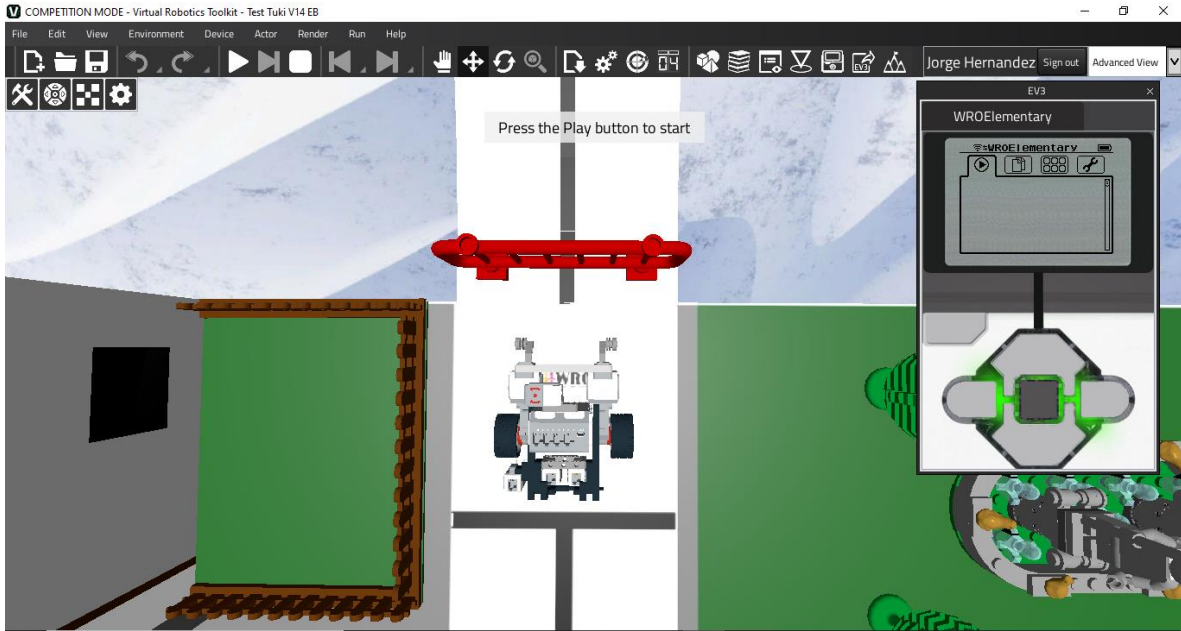
Simple Mode



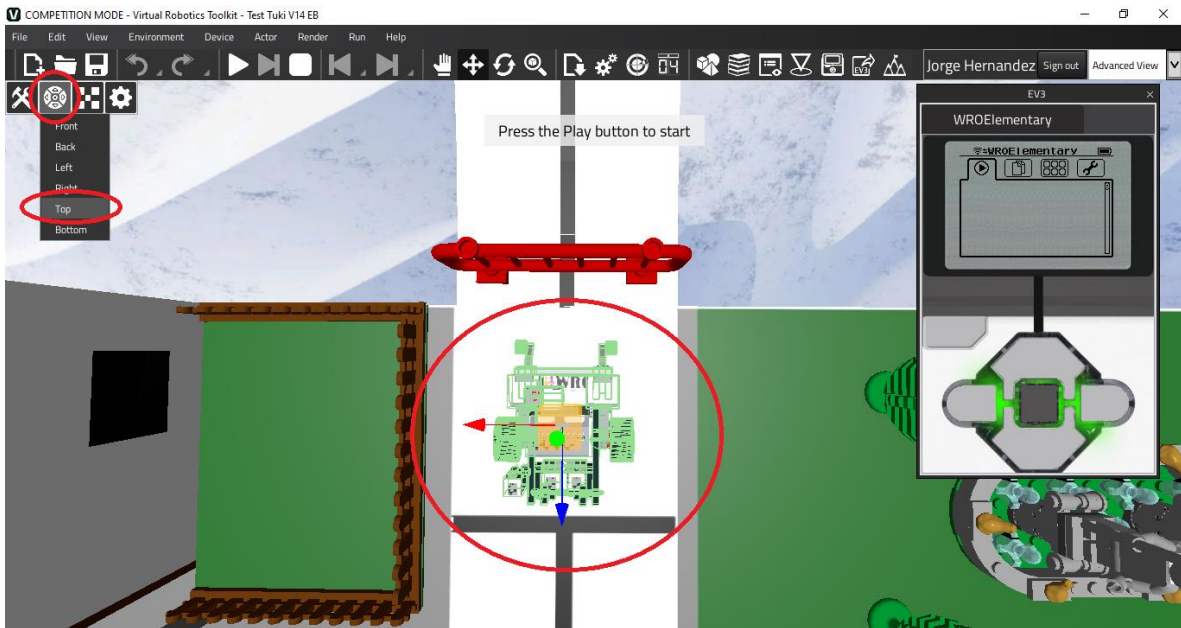
Advanced Mode



## 2) Move the Virtual EV3 Brick.



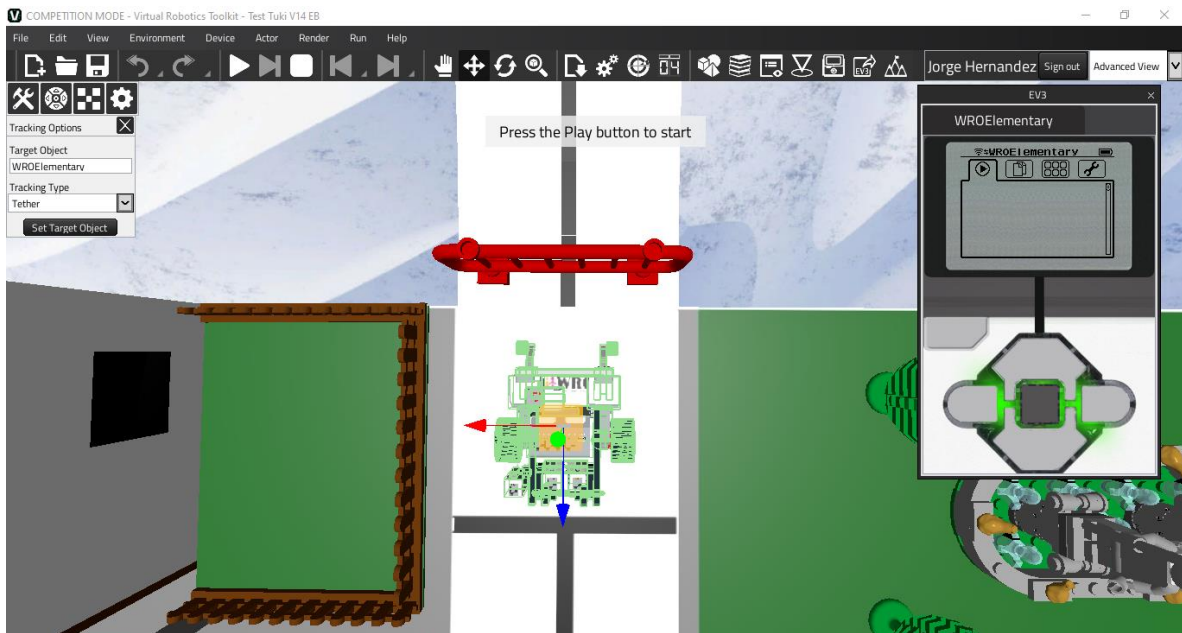
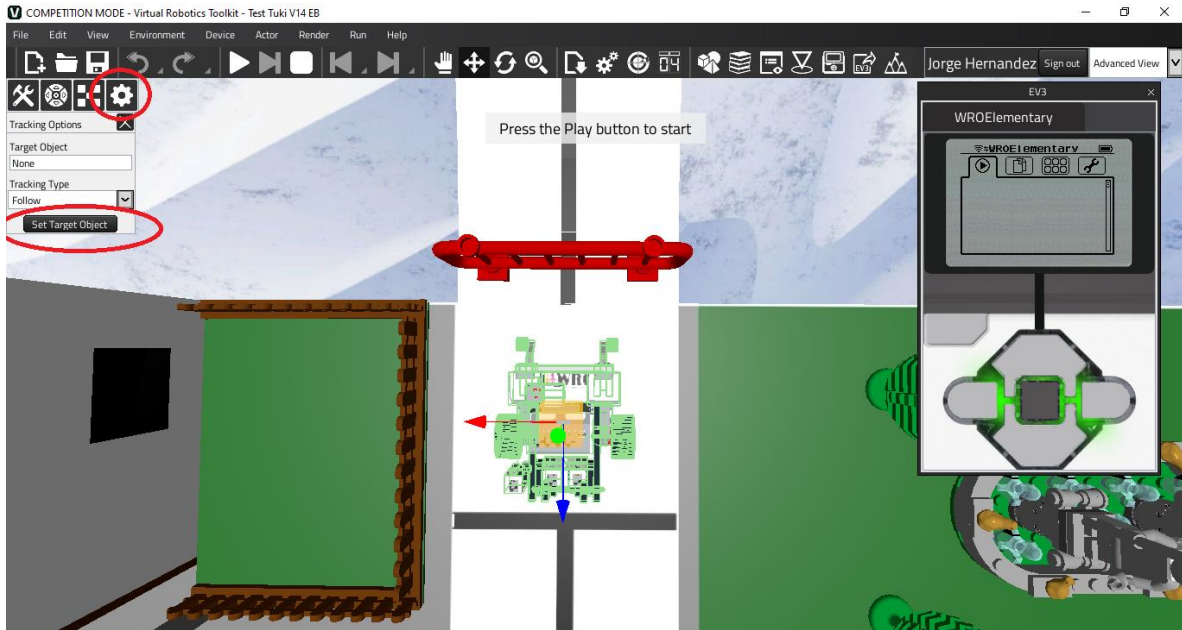
## 3) Select the robot and use Top Camera.





4) Use “Tether” Tracking type.

The robot must be selected and then click on “Set Target object”.  
Change Tracking type to “Tether”.



Top Camera & Tether Tracking type tutorial:

<https://youtu.be/hNvJNMnV9dM>

## How to share your video to us?

The participant needs to click on the link and fill the form.

Please be aware of your email, because in case there's a problem with your video or your results, we will contact you.

<https://forms.gle/TNgmEvSPnqK4zRVp7>

\*Please be careful, the form is specific for this category

## Important Information

The end time to **submit results** is December 6 at 10:59 PM GMT-5.

The end time to **fill the form** is December 6 at 11:59 PM GMT-5



Closing Ceremony is December 7 at 11:30 PM GMT-5

If a top 20 participant doesn't fill the form we will take the score out of the leaderboard.

*Recommendation:*



If you think your result will be on top 20 you can fill the form before 10:59 pm.

# Tie Result

18	 Participant 1	2020-11-05	5	100	00:55.955
18	 Participant 2	2020-11-05	3	100	00:55.955

If participants have the same result on the leaderboard the judging team will review the next highest results of the participants. When the judging team knows who get better results will take out 0.001 seconds to the time on the leaderboard of the participant winner to tiebreaker the result.

On the example “Participant 2” get a second better high score, it means we will take 0.001 seconds of the participant time result.

18	 Participant 2	2020-11-05	3	100	00:55.954
19	 Participant 1	2020-11-05	5	100	00:55.955

If one of the participants only have 1 submitted round the other participants will be the winner of the tiebreaker.



## Difference Real Time Result

Judging team detected less than 1% of the users have a PC issue where the time result it submits take out the decimal seconds.

Example:

Real time result: 00:55.230

Submitted time result: 00:55.000

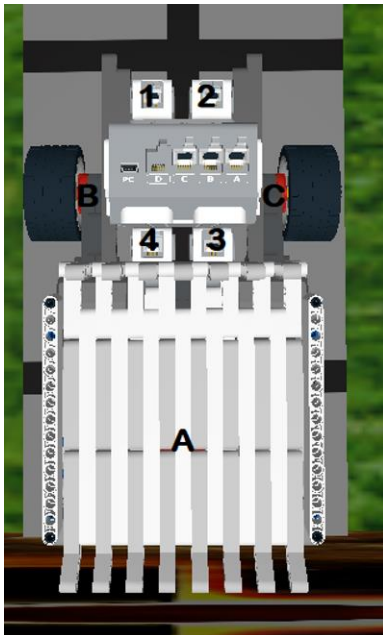
If the participant has this issue and is on the Top 20 we will exchange with the time displayed on the video.

Remember if you are on the Top 20 it is very important to fill the form with your video, in case the participant hadn't fill the form with the video the result will be taken out of the leaderboard.

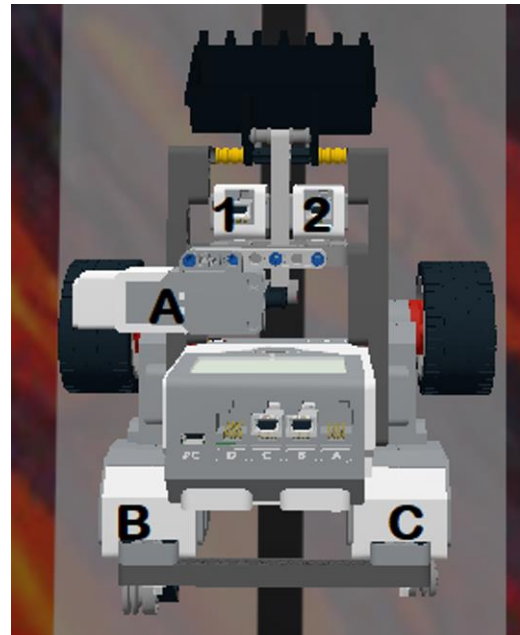
## Robot Ports

\*Remember, is NOT allowed import a new robot.

Bot 1



Bot 2



# Robot Missions

There are two robots to solve the challenge

Competitor cannot import their own robots.

**Both robots must be started with a maximum difference of 5 seconds.**

**The task is to bring the resources from the mines to the corresponding plants.**

For more understanding you can see the next sample video:

[https://youtu.be/\\_VH2MSmYWkk](https://youtu.be/_VH2MSmYWkk)

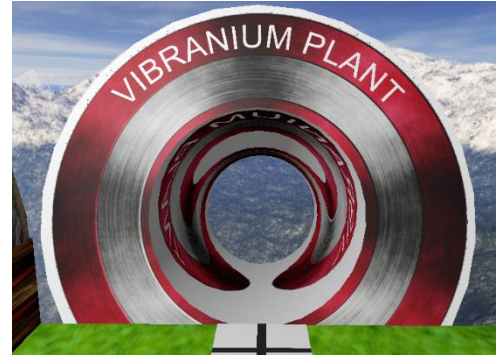
## Score

<b>Vibranium Mines Senior</b>	<b>Each</b>	<b>Total</b>
<b>Vibranium Plant</b>		
The purple vibranium spheres inside the vibranium plant	<b>3</b>	<b>9</b>
<b>Fusion Plant</b>		
The yellow capsules inside the fusion plant.	<b>3</b>	<b>9</b>
<b>Incorrect object</b>		
The object is inside the wrong plant.	<b>1</b>	<b>9</b>
<b>Maximum Score</b>		<b>18</b>

**\*You must score 18 points to update your result on the portal.**



The purple vibranium spheres



Vibranium Plant



The yellow capsules



Fusion Power Plant