

# Ten80 Education National STEM WEb/F2F Race



**Saturday October 3rd**  
**6701 Bock Road Fort Washington Md.**  
**20744**



**10am to noon**

**Race Events**

**5 Minute Qualifier**

**10 minute challenge track #5**

**Oval Track 25 Minutes**

**(50 x 75)**

**3 minute presentation**

**Gym Floor slippery**

**Randy McCain**

**202-670-4179**

**rmccain@mwsso.org**

**Register at [www.mwsso.org](http://www.mwsso.org)**

**September 28th**





# Points RACE



Metro Warriors STEM Alphas

Fast & Furious



## Web-Based Points Race

- The sub-categories and values for each submission are detailed in the Web-Based Points Race System section
- of the NSL Handbook. Some activities can be submitted multiple times such as those under public relations.
- Others can only be submitted once through the year like the Data-Driven Design Project.
- All points race submissions are uploaded to the competition website. Full instructions on how to navigate
- that site can be found at the curriculum website (moodle) under the course entitled, National STEM League
- Competition.

## Face-to-Face Invitionals & NSL Finals

- Invitionals mirror the NSL Finals with one exception, not all head-to-head events are required at Invitionals.
- The following table outlines possible Student Racing Challenge events. For details on each category and evaluation rubrics, see the NSL Handbook section for that category. Download sample event guides at the curriculum website (moodle) under the course entitled, National STEM League Competition.

**Randy B. McCain Jr.**

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# How Qualify for Ten80 Nationals



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1. Web-based competition and collaboration via [www.NationalSTEMLeague.com](http://www.NationalSTEMLeague.com)
2. Face-to-Face via Open Invitationals
3. BOTH!



## Web-Based

Periodically throughout the season (Sept. 1, 2014 - May 2015), Rover and Racing points leaders are awarded invitations to the National Finals. Energy and Innovation teams submitting exemplary work are awarded invitations.

Invitations

## Face-to-Face Invitationals

Invitationals can be organized locally by a Sanctioning Official or by Ten80's team. 1st and 2nd place winners of any Sanctioned Invitational is awarded an invitation to the National Finals.

Winners of select Invitationals organized by Ten80 earn travel stipends thanks to sponsorship from the U.S. Army.

## Wild Card!!!

Ten80 awards teams invitations to teams showcasing exemplary work and/or teamwork but that haven't earned an invitation through the web-based or Invitational path.

## National STEM League Finals

2 days of intense competition and collaboration

Opening Banquet

Racecar Events

Robotics Events

Team Presentations

Project Presentations

Graphic Design Show

Grants & Prizes

Experience & Pride

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# Pre Race Checklist



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1. Are your remote batteries fully-charged?
2. Are your car batteries fully-charged?
3. Have you checked your remote and car batteries with your multimeter?
4. Do you have all wheels and tires for the vehicle (including spares)? Do they have good treads and are ready for the pit stops?
5. Do you have all tools, spare parts and equipment?

## Car Checklist:

1. Check all the screws and nuts to make sure they are tight. Be careful though, do not over-tighten! Make sure all moving parts can move freely so there is no binding or drag.
2. Check all wires, make sure they are plugged in, and have a good tight fit. Make sure they are not going to rub on driveshaft, tires or ground. Also make sure they are out of the way of the suspension so they will not get pinched.

3. Check the motor. Is it tight and secure?

4. Check the spur and pinion gears. Is your gear mesh correct (not too loose, not too tight)? How do you know how your mesh is right you ask? Please view the Pre-Race Checklist Video.

5. Check the tires to make sure they are tight. Not too tight, but not too loose.

6. Turn the car on. Test the throttle while holding it in the air. Does everything move freely? Does everything look ok, sound ok?

7. Put the car body on, making sure all body pins are in and that the body sits securely on the mounts. Is the body where you want it? Attach the top side body pins and check the steering. Are all moving part clear of the body?

Don't forget to check out our additional Pit Area Setup Video!

Good luck and keep the sunny side up!

