



The Winston School

Winston Solar

Parent Newsletter



Hello Parents,

Winston Solar is gearing up for a racing year during 2022! **There is a mandatory parent meeting scheduled for Saturday, September 18 from 10:00-11:00 AM.** Meet other solar and alumni parents, hear more about the solar program, and learn how you can help support the solar team as they prepare for a cross-country race from Texas to Colorado.

Parent GroupMe: Keep up to date with what's happening in solar in the Parent GroupMe app. If you would like to be added to the Parent GroupMe, please text me with your name and that you would like to be added. My cell phone number is 940-703-5006. The app is used for our team schedule, sharing pictures/video clips, asking questions, and any updates. **Saturday, September 11 from 9:30 AM to 4:00 PM is a mandatory workday! This is the first Solar Challenge Workshop and it will be virtual. We will be watching it as a team from Winston.**

Building a Solar Car

New Team members this week built a solar car kit learning about gears, wiring, and solar panel charging. We then raced them outside!



Captain and Co-Captain Teaching



On Wednesday Solar Co-Captain Alvaro gave an introduction to brakes and the braking system. While reviewing the drum and disc brakes, he introduced what constitutes a brake, how brakes work, the current brake system, and how hydraulic pressure is applied. He covered the differences between DOT 3 and 4 brake fluid, and the

different fluids used for the front braking system versus the back braking system. He also shared the requirements that need to be met by The Solar Car Challenge in their Brake Scrutineering Station. Team members were then taken to the solar garage to take a detailed look. A quiz was given on Thursday which reviewed the subject matter.





On Thursday Solar Captain Jackson began instruction on the drive motor and steering and covered the DC brushless motor, gear reduction shaft, rear axle, four-gear and chain connection mechanism, and the gear ratio unique to our solar car. Jackson finished with a walk-through of the steering system including the steering wheel, a-arms (upper and lower), steering rack, pinion, tie rods, steering shaft, and spindle. A quiz will be given by Jackson on Friday over the drive motor and steering system.



Winston Solar