

Slot Car Design Project



1. ___/20pts. Primary Task. Design a body to fit the Parma 1/32 slot car chassis. Mold the body out of designer's clay, obtain lift and drag data in the wind tunnel, vacuum thermal form the body with acrylic plastic, and affix it to the assembled chassis. The overall dimensions of the slot car cannot exceed 15cm long, 7cm wide, and 4cm high.
2. ___/20pts. Secondary Task. Obtain lift and drag information for your finished slot car. The slot cars will be raced against one another. Determine how well wind tunnel lift and drag results for you slot car body design relate to the final racing results.
3. ___/10pts. Logbook entries contain all pertinent information and follows APA style. (see Logbook Guidelines)
4. ___/10pts. Your participation.
5. ___/15pts. Group Presentation. All group members are involved, visuals are used, design process is discussed, and results are discussed. (see Group Presentation Guidelines)
6. ___/25pts. Final Report. APA style is followed. Report should contain title page, body (introduction, experimental process, conclusions, discussion), references, tables and figures if applicable. Describe the practicality of electric vehicles and where the technology is at present for consumer electric cars. Also discuss the environmental impacts electric vehicles have or can have in the future. Hand in written copy and email electronic copy to marencik_j@shaker.org. (Refer to Paper Guidelines)

Due Date: _____