

## CALIFORNIA STATE SCIENCE FAIR 2016 PROJECT SUMMARY

Name(s) **Project Number** Sanskriti Balaji; Harshikasai Kellampalli 36653 **Project Title** Riding On Air: How a Hovercraft Hovers **Abstract Objectives/Goals** Our objective/goals was, if a certain amount of air (depending on the weight of ects being placed on it) is let into the hovercraft then the hovercraft will hover. Methods/Materials We followed the instructions on Science Buddies to build our hove traft. The three most important variables in this engineering/aerodynamic project would be the wood base, plactic sheet, and the leaf blower. **Results** If a certain amount of air is not let into the hovercraft, the hovercraft will not be able to rise or hover. Air is fluctuating inside the hovercraft at all times for it to be in motion. Also, the hovercraft speed (measured in cubic feet per minute) depends on the amount of weight the person sitting on it is. **Conclusions/Discussion** Our hypothesis was true. There needed to be a certain amount of air measured in cubic feet per minute for it to be hovering. Also, we learned that if there is foo much air pressure in the hovercraft, it will burst and tear the plastic. We met our design criteria, which was that the bovercraft needed to hold a person that weighed at least 112 pounds. **Summary Statement** overcraft hovers with a certain amount of weight, and how many cubic feet it can travel. **Help Received** Our dads helped us build the hovercraft.