

CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) **Project Number Martin Ok J0116 Project Title Frisbee Aerodynamics: The Effects of Varying Weights and Angles** Abstract **Objectives** The objective of this study is to determine which frisbee weight and launch angle resulted in the furthest flight distance. Methods 3 frisbees of varying weight (200 grams, 175 grams, and 125 grams) and a tape measure. **Results** Each frisbee was thrown multiple times at three different launch angles. The distance traveled by each frisbee was measured with the tape measure. The frisbee weighing 175 grams thrown parallel to the ground (0 degree launch angle) had the greatest average distance flown. Conclusions Throwing the frisbees of different weights at different angles, demonstrated that other variables are also important in determining flight distance. Environmental factors (i.e. wind, rain) and human factors (i.e. throwing strength and technique) are significant factors in determining flight distance. **Summary Statement** I showed the effects of frisbee weight and launch angle on flight distance. **Help Received**

None. I performed the project and measured the results by myself.