**Glider Project Overview**

**Task:** Use the engineering design process to create an aerodynamic glider meeting various specifications.

**Challenge:** Maximize the flight distance (m) to mass (g) ratio while minimizing costs.

**Rules**

* Maximum team size: three students (smaller teams are permitted)
* The maximum budget is $30 per team.
* Use only use commonly available materials. If you have a stash of specialized, but helpful materials, please verify with the instructor that they are permitted.
* No glider or other aircraft kits or models may be used.
* The glider must not use any propulsion besides the standardized launcher.
* The glider must be able to launch from the standardized launcher.
* You are expected to adhere to both the spirit and the letter of the rules. If you are unsure, ask.

**Testing**

* Every team uses the same, standardized launching mechanism to launch the gliders for testing.
* For glider pre-testing, optional practice times will be established before and after school.
* Final testing will be done in class with the instructor having the final word on glider distance.
* Each group launches once before the second round of testing begins. If time and launcher allow, each glider get three launches. The flight distance-to-mass ratio calculation is made using data from the best of the three launches.

**Submission Deadlines**

* Signed contract (per individual): ASAP
* Research evidence (per team): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Draft and material list (per team): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Constructed glider (per team): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Final report (per individual): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Good luck!**