

Science Olympiad 2019-2020 Season Trajectory Checklist / Data Sheet

Version 1.0

Event and Construction Requirements

- 1. Competitors construct only 1 device
- 2.b. Items moveable by competitors
- 2.b. Device, projectiles, and log impounded
- 2.c. Competitors wear eye protection during testing
- 2.d. Competitors must be able to answer questions about the device per the Building Policy
- 3.a. Device fits in 60.0 x 60.0 x 60.0cm box
- 3.d. Launch force only due to non-metallic solids
- 3.c. Triggering device doesn't add energy
- 3.c. Triggering device at least 75cm away
- 3.c. Triggering device not dangerous
- 3.d. Projectiles are unmodified
- 3.e. Device won't damage floor
- 3.f. Device has no electrical components
- 4.c. Design log pages affixed together

Graphs / Tables

Data spans one variable range (60 pts max)	_____
At least 10 data points (60 pts max)	_____
Proper labeling (e.g. title, name) (60 pts max)	_____
Number of graphs/tables (4 max)	_____
Labeled device picture/diagram (50 pts max)	_____
2+ example calculations (50 pts max)	_____

Close Target Launch 1

Impact Distance (mm)	_____
Failed launch	Y N

Close Target Launch 2

Impact Distance (mm)	_____
Bucket shot	Y N
Hit bucket at first impact	Y N
Contact with inside bottom	Y N
Failed launch	Y N

Team Information

Team #: _____

Team Name:

Competitor Names:

Far Target Launch 1

Impact Distance (mm)	_____
Failed launch	Y N

Heavy Counterweight Launch 2

Impact Distance (mm)	_____
Bucket shot	Y N
Hit bucket at first impact	Y N
Contact with inside bottom	Y N
Failed launch	Y N

Penalties

Competition violations(s)	Y	N
Team didn't bring a device	Y	N
DQed for unsafe operation	Y	N
Construction violations corrected	Y	N
Missed impound	Y	N

Team Verification

5.k. I verify the event supervisor has reviewed with me my team's recorded device testing data.

Signature _____

