

# Science Olympiad 2020-2021 Season Storm the Castle 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 and log impounded
- 2.d. Competitors wear eye protection during testing
- 2.e. Competitors must be able to answer questions about the device per the Building Policy
- 3.a. Device fits in 65.0 x 65.0 x 65.0cm box
- 3.b. Triggering device doesn't add energy
- 3.b. Triggering device at least 75cm away
- 3.b. Triggering device not dangerous
- 3.c. Device accommodates weights and projectiles
- 3.d. Launch force only due to falling weights
- 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 (6 pts max) \_\_\_\_\_
- At least 10 data points (6 pts max) \_\_\_\_\_
- Proper labeling (e.g. title, name) (6 pts max) \_\_\_\_\_
- Number of graphs/tables (4 max) \_\_\_\_\_
- Labeled device picture/diagram (5 pts max) \_\_\_\_\_
- 2+ example calculations (5 pts max) \_\_\_\_\_

### Light Counterweight Launch 1

- Target Distance (cm) \_\_\_\_\_
- Accuracy Score (cm) \_\_\_\_\_
- Hit target at first impact Y N
- Contact with inside bottom Y N
- Failed launch Y N

### Light Counterweight Launch 2

- Target Distance (cm) \_\_\_\_\_
- Accuracy Score (cm) \_\_\_\_\_
- Hit target at first impact Y N
- Contact with inside bottom Y N
- Failed launch Y N

## Team Information

Team #: \_\_\_\_\_

Team Name: \_\_\_\_\_

Competitor Names: \_\_\_\_\_

### Heavy Counterweight Launch 1

- Target Distance (cm) \_\_\_\_\_
- Accuracy Score (cm) \_\_\_\_\_
- Hit target at first impact Y N
- Contact with inside bottom Y N
- Failed launch Y N

### Heavy Counterweight Launch 2

- Target Distance (cm) \_\_\_\_\_
- Accuracy Score (cm) \_\_\_\_\_
- Hit target 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 \_\_\_\_\_