

# STORM THE CASTLE A



Checklist - 2019

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

Rank: \_\_\_\_\_

Student Names: \_\_\_\_\_

Tier/Final Score: \_\_\_\_\_

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4a. The device, tools, notes and graphs are impounded before the start of the competition	Y	N
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## Construction Parameters

2a. The entire device, including the projectiles and counterweight, is no more than 70 cm high x 70 cm wide x 70 cm long when it is in the ready-to-fire position.	Y	N
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2b. The device is able to be triggered from outside the Launch Area by pulling a string, firing pin, etc.	Y	N
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2d. The device, without the counterweight and projectile, does not contribute energy to the launch.	Y	N
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2d. Without a counterweight and projectile, the unloaded device does not move in the direction of a launch motion when released from any position prior to where the projectile is released.	Y	N
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<b>Is the device free of any construction violations?</b>	<b>Y</b>	<b>N</b>
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## Data Tables and Graphs

3a. The team presents a correctly labeled graph showing the counterweights (Kg) vs. distance (meters). If hand drawn, it is on graph paper. (4 points max)	Y	N
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3c. All graphs are marked with the school name and team number. (2 points max)	Y	N
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3d. An example showing how to use the graphs to position the target for a hypothetical counterweight and projectile is included. (2 points max)	Y	N
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3e. Students are able to answer questions about how the data was collected and how the graph is used. (2 points max)	Y	N
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## Competition Parameters

4b. Once the team enters the event area to compete, they do not leave the area or receive outside assistance, materials or communication until they are finished competing.	Y	N
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4c. Competitors wear eye protection (Z87+) during set-up and competition	Y	N
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2b. The device is placed within the 2 meter by 2 meter Launch Area and is not anchored to the ground. Except for the triggering mechanism, no part of the device and counterweight extends out of the Launch Area before it is triggered or after the launch motion is complete.	Y	N
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4d. The device does not utilize AC powered electrical equipment	Y	N
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<b>Are there any competition violations?</b>	<b>Y</b>	<b>N</b>
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## Scoring Parameters

	Launch #1		Launch #2		Launch #3	
Requested Target Distance (TD) in whole meters (m):	_____					
Accuracy Score (A) measured to the nearest centimeter (cm):	_____					
Scoring Bonus (B):	Y	N	Y	N	Y	N

## Penalties

1. A participant is warned by the judges for not correctly wearing proper eye-protection.	Y	N	Y	N	Y	N
2. A participant is in the Launch Area when the launch is triggered.	Y	N	Y	N	Y	N
3. The device goes through an unintentional launch motion.	Y	N	Y	N	Y	N
4. No warning is given prior to a launch.	Y	N	Y	N	Y	N
5. The team receives outside coaching.	Y	N	Y	N	Y	N