**Findley Oaks Elementary**

**STEM Design Brief**

**Name: Punkin’ Chunkin**

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| **Subject:**  Fall STEM Activity | **Grade Level:**  **2** | **Suggested Timeframe:**  2+hours |

**Inspiration:** [**http://youtu.be/dg4hboje3VE**](http://youtu.be/dg4hboje3VE)

**Standard: S2CS4:** Students will use the ideas of system, model, change, and scale in exploring scientific and technological matters.

**Catapult- ˈkatəˌpəlt,-ˌpo͝olt**

***noun***

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| **a device in which accumulated tension is suddenly released to hurl an object some distance, in particular.** |  |
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***Verb***

**hurl or launch (something) in a specified direction with or as if with a catapult.**

**"the plane was refueled and catapulted back into the air again"**

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| ***synonyms:*** | [**propel**](https://www.google.com/search?es_sm=93&q=define+propel&sa=X&ei=6bMJVMIDjOGwBLizgvAG&ved=0CCkQ_SowAA)**,**[**launch**](https://www.google.com/search?es_sm=93&q=define+launch&sa=X&ei=6bMJVMIDjOGwBLizgvAG&ved=0CCoQ_SowAA)**,**[**hurl**](https://www.google.com/search?es_sm=93&q=define+hurl&sa=X&ei=6bMJVMIDjOGwBLizgvAG&ved=0CCsQ_SowAA)**,**[**fling**](https://www.google.com/search?es_sm=93&q=define+fling&sa=X&ei=6bMJVMIDjOGwBLizgvAG&ved=0CCwQ_SowAA)**, send flying,**[**fire**](https://www.google.com/search?es_sm=93&q=define+fire&sa=X&ei=6bMJVMIDjOGwBLizgvAG&ved=0CC0Q_SowAA)**,**[**blast**](https://www.google.com/search?es_sm=93&q=define+blast&sa=X&ei=6bMJVMIDjOGwBLizgvAG&ved=0CC4Q_SowAA)**,**[**shoot**](https://www.google.com/search?es_sm=93&q=define+shoot&sa=X&ei=6bMJVMIDjOGwBLizgvAG&ved=0CC8Q_SowAA)  **"the boulder was catapulted into the sea"** |

B**ackground/Design Challenge:**

Help! Johns Creek, Georgia is growing way too many pumpkins! They need you to design the perfect catapult to launch the **pumpkins** out of Johns Creek.

You will design an ideal “PUNKIN CHUNKIN” catapult for us to launch the extra pumpkins out of our city.

**Criteria:** The catapult must launch a marshmallow pumpkin.

Only the supplies listed may be used.

**Constraints:** The “*Punkin Chunkin”* launcher must stand on its own.

**Materials: (You may select from these items.)**

* craft sticks
* rubber bands
* one gallon sized milk cap
* marshmallow pumpkins

**Tools: (You may use these tools, but they may not become part of your product.)**

* scissors
* student research
* rulers
* glue
* hot glue with teacher’s assistance