

Group Number

Pumpkin Launchers

Hour_

Question: How can you use the materials to design and build a launcher that will propel a candy pumpkin the farthest?

Individual Idea: Make a list of ideas for building the launcher.

Group Planning: Make a plan for how your group will build a device using only the materials provided. Make to include a diagram, labels and detail in your plan.

Name

Build: Use the materials provided to make a pumpkin launcher.

In your design, what do you think will cause your launcher to propel the candy the farthest?

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Testing: We will be measuring the distance in centimeters from the starting point of the launch to where your candy pumpkin lands on the ground. We also will be measuring the amount of time your pumpkin spends in the air from when it is released to the time it hits the ground. Each group will have 3 trials and must record each launch in the table below.

Trial	Distance (cm)	Time (sec)
1		
2		
3		
Average		

Improvements: Describe ways you could improve the launcher. What can you change to the design so the pumpkin can go further than your first trials?

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 Testing With Improvements: Again, we will be measuring the distance in centimeters from the starting point of the launch to where your candy pumpkin lands on the ground. We also will be measuring the amount of time your pumpkin spends in the air from when it is released to the time it hits the ground. Each group will have 3 trials and must record each launch in the table below.

Trial	Distance (cm)	Time (sec)
1		
2		
3		
Average		

Individual Reflections:

- 1. Was your launcher more successful during the original trials or the trials with your improvements? Explain.
- 2. If you could change your design one more time, what would you do?
- 3. Describe how your team worked together on the launcher.

		chart below reco d the testing with				e for
Group	Original Testing Average Distance (cm)	Testing With Improvements Distance (cm)	Average Distance (cm)	Original Testing Time(sec)	Testing With Improvements Time (sec)	Average Time (Sec)
1						
2						
3						
4						
5						
6						
7						
8						
9						

Graph 1: On the next page, use the information from our class results to create a line graph showing the average distance.

Graph 2: On the next page, use the information from our class results to create a bar graph showing the average time.

