

Popsicle Stick Catapult Engineering Challenge

Can you create a popsicle stick catapult that launches a marshmallow the farthest distance?

Created by: Smart Chick Teaching Resources



Teacher Directions

Materials:

- Popsicle sticks
- Rubber bands
- Plastic spoons
- Plastic bottle caps (optional)
- Liquid glue
- Mini-marshmallows
- Tape measures

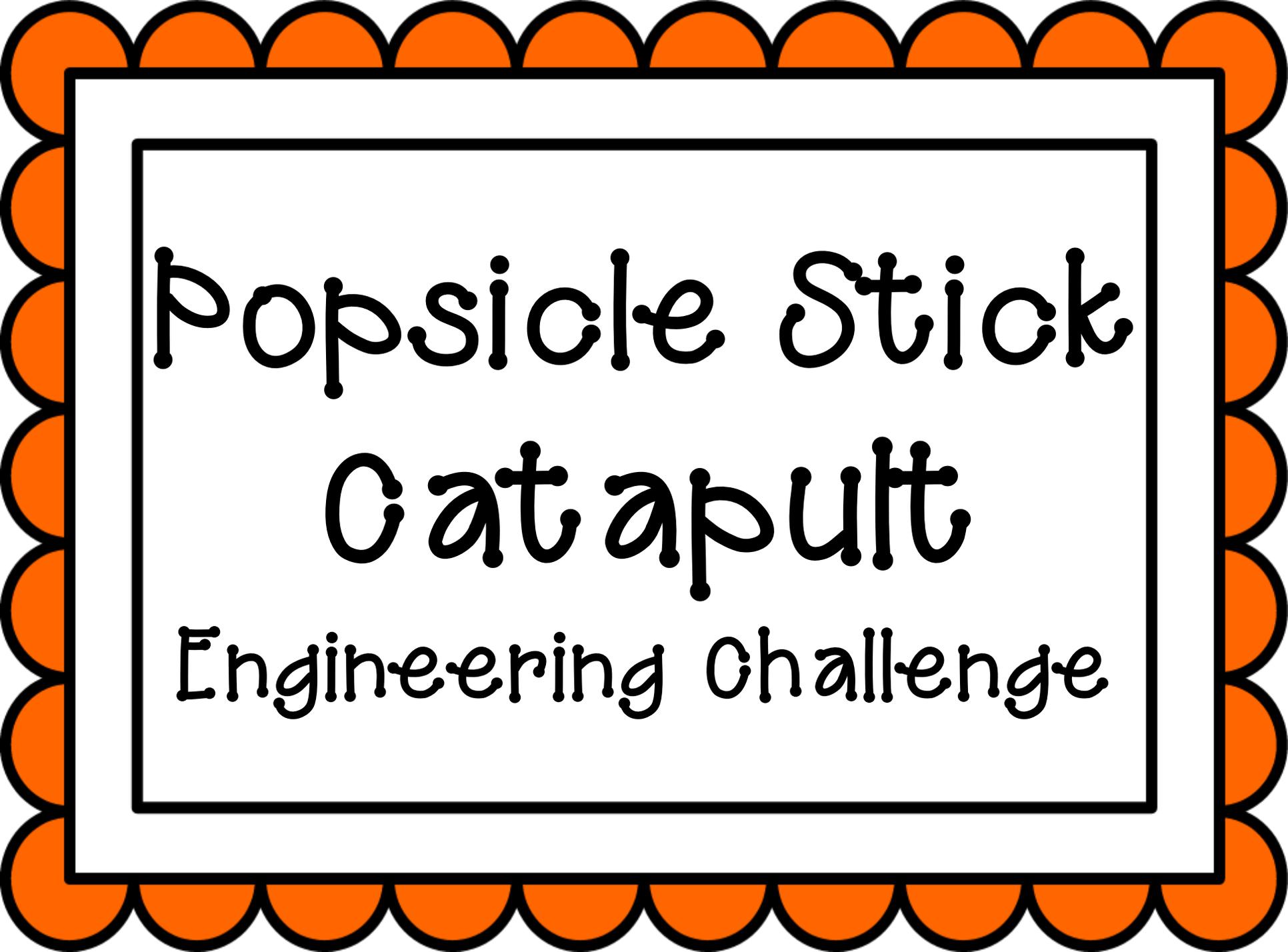


Set-Up:

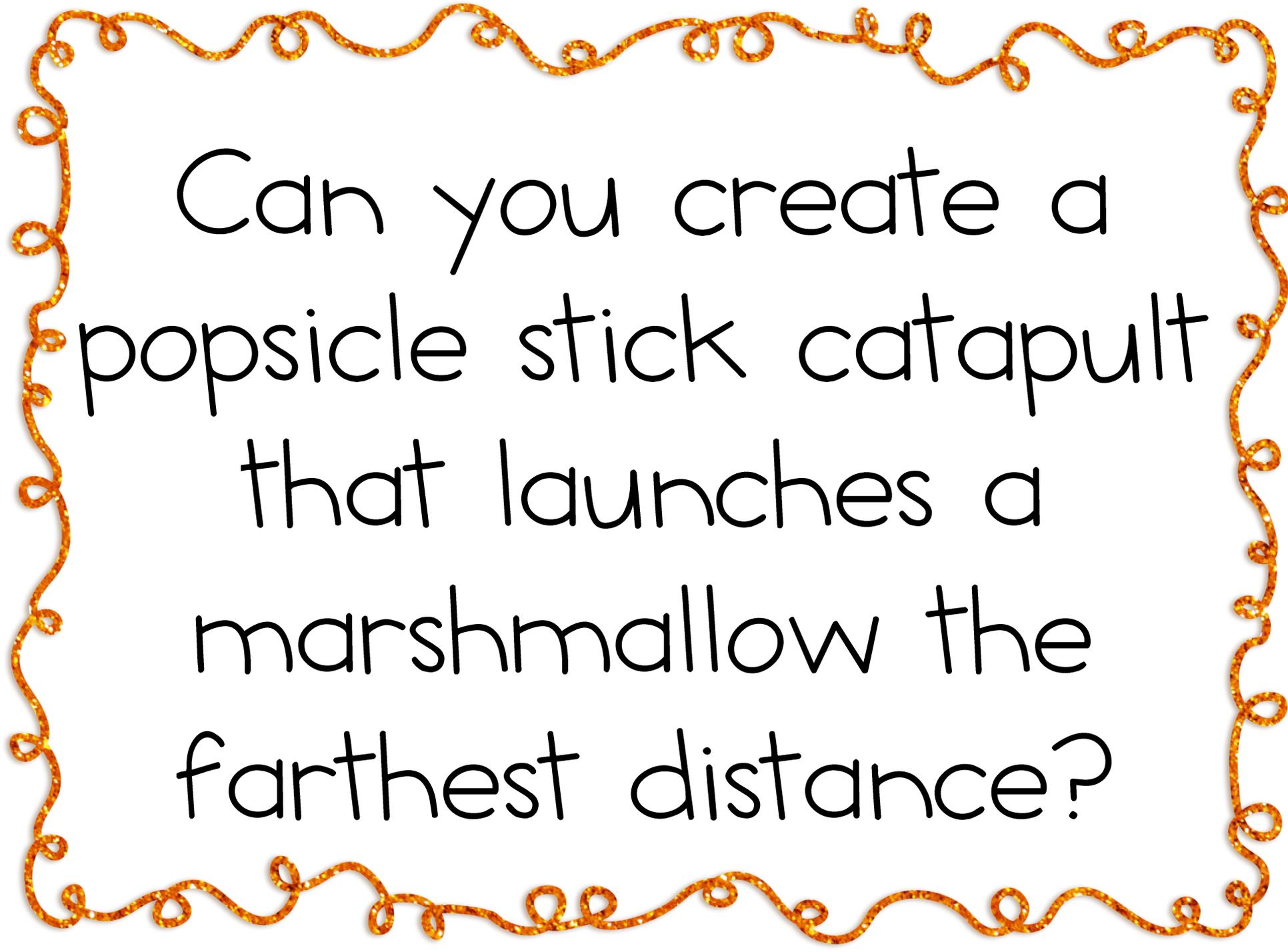
- Place materials in a central location for each group.
- Provide a flat surface for the construction.
- You may want to show students some pictures of catapults.

Goal:

Students will design and build a popsicle stick catapult that launches a mini-marshmallow the farthest distance.



Popsicle Stick
Catapult
Engineering Challenge



Can you create a
popsicle stick catapult
that launches a
marshmallow the
farthest distance?

Challenge Rules

- You must use *only* the materials provided for the challenge.
- The catapult must be constructed on top of the table (or other flat surface).
- Your goal is to launch the marshmallow the farthest distance with your catapult.
- It must work like a catapult.
- There are many different ways to complete this challenge. Be creative!

Student Lab Sheet: Popsicle Stick Catapult Challenge

Name _____

Were you successful in this challenge? Why or why not?

What was the most difficult part of this challenge? Why?

What was the best idea you came up with during this challenge?

How far did you launch your mini-marshmallow with the catapult? What launching strategy did you use?

What did you learn about construction and engineering during this challenge?

Sketch your solution on the back of the sheet.

My Questions:

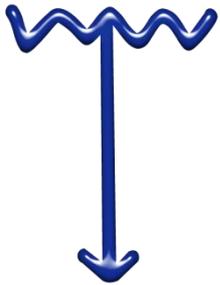


Student Lab Sheet: Popsicle Stick Catapult Challenge

Name _____



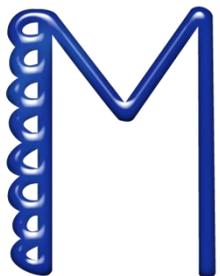
What is the science behind this challenge?



Research this topic using books and/or the Internet and record any information you find.



What was your design solution for this challenge?



What data can you record from this challenge?

Thanks for your purchase!

This engineering challenge activity is one of many that I have created to use in my classroom! I place these challenges, one per table, and the students rotate around the room in order to complete them. You can also do this as a whole class activity. There are no right or wrong answers, many different solutions will work! You could also rotate these challenges through a science center. I store everything in a dollar store gift bag or plastic tub!

Borders by:

Ashley Hughes <http://www.teacherspayteachers.com/Store/Ashley-Hughes-38>

Glitter Meets Glue Designs <http://www.teacherspayteachers.com/Product/Dashed-Glitter-Doodle-Badges-Frames-Clipart-56-Graphics-Glitter-Meets-Glue>

