

Plan it!
Build it!
Launch it!

CATAPULT BLUEPRINT

Little Lab Challenges • Episode 6

Engineers
test and
improve!

BUILD A MINI MARSHMALLOW CATAPULT!

MATERIALS

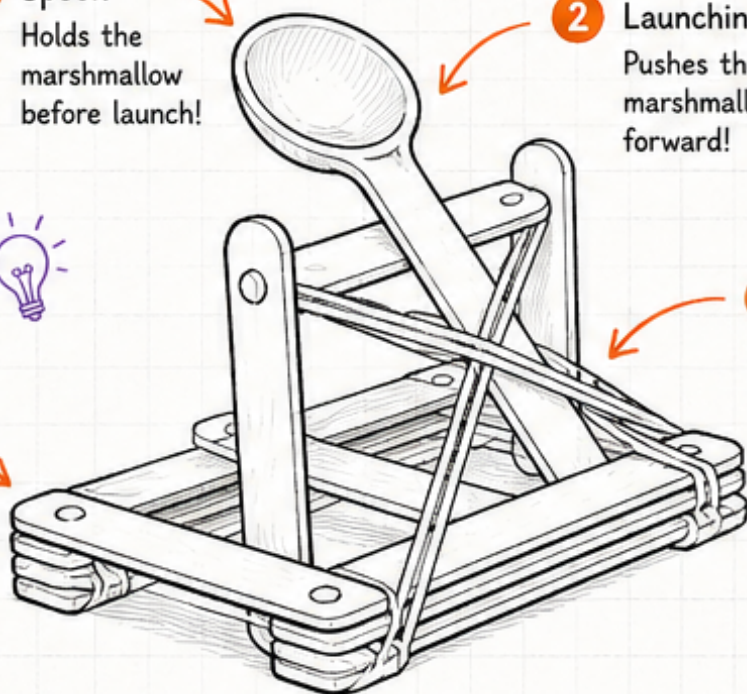
- ☐ 7 craft sticks
- ☐ 4-5 rubber bands
- ☐ 1 plastic spoon
- ☐ mini marshmallows
- ☐ tape (optional)

1 Base Stack
Three sticks
stacked for
extra strength!

4 Spoon
Holds the
marshmallow
before launch!

2 Launching Arm
Pushes the
marshmallow
forward!

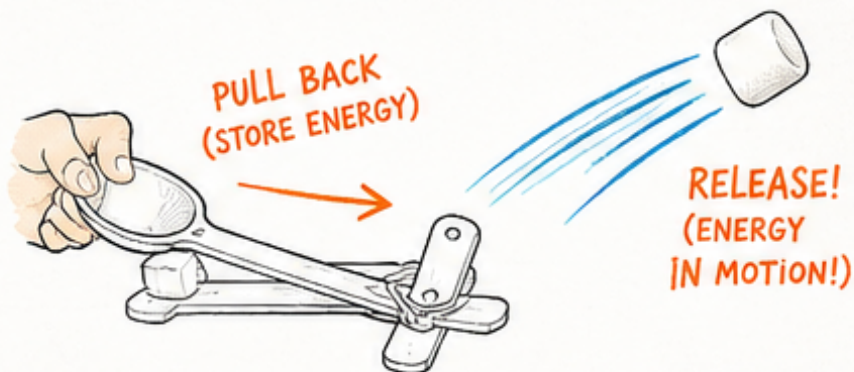
3 Rubber-Band
X Engine
Stores energy
when pulled
back!



HOW IT WORKS!

Pulling the spoon back stores **elastic potential energy** in the rubber bands.

Letting go turns it into **kinetic energy** — and **SNAP**, the marshmallow flies!



Engineer Tip: Test different pull-back distances to launch your marshmallow farther!



THE
**BRAINIAC
BUNCH**

Aim high!
Have fun!
Try again!



TARGET PRACTICE CORE SHEET

Little Lab Challenges • Episode 6

Great
engineers
never stop
improving!



ROUND	POINTS SCORED
1	
2	
3	
4	
5	
6	

CHALLENGE CHECKLIST

- ☐ Hit the target once
- ☐ Hit the bullseye
- ☐ Tried 3 different pull-back distances
- ☐ Beat my first score



MY BEST SCORE:

I AM A CATAPULT ENGINEER!

SCIENCE
WORDS
TO KNOW!

ELASTIC POTENTIAL ENERGY



Stored energy in stretched or pulled things, like rubber bands.

KINETIC ENERGY



The energy of moving objects.

TRAJECTORY



The curved path an object takes when it flies through the air.