

Catapult Design Worksheet

Problem: You are an engineer who specializes in designing cool toys and machines for games. You were recently contacted by the SuperFun Toy Company to help design a machine called a catapult for a game that will launch Ping-Pong balls at a series of targets. To ensure that children and adults alike will love the game, you need to make sure the catapult is both accurate and precise.

Constraints: The only building materials available to you are listed below.

Materials:

Popsicle Sticks
Masking Tape
Straws
Rubber Bands
Plastic Spoons
Cardboard Base (1 per group)

Imagine: Brainstorm several ideas you have for how to use the above materials in your catapult. Draw pictures!

Name: _____ Date: _____ Class: _____

Design: Draw out your group's best catapult design. Be sure to label where you will use all of the different materials (Popsicle sticks, tape, plastic spoon, etc.).

Build: List how much of each material you will need to build your catapult. Once your design and materials list are complete, you may collect materials from your teacher. Make sure you labeled the materials in your design!

Item	# needed
Cardboard Base	1
Popsicle Sticks	
Masking Tape	
Straws	
Rubber Bands	
Plastic Spoons	

Name: _____ Date: _____ Class: _____

Test: How well did your catapult work? What are two ways you can change your catapult to make it better? List these ideas here, and then start over at the beginning of this sheet.