Name:

LAB: CATAPULT DESIGN

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 Marshmallows 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

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

<u>**Design:**</u> 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.).

<u>Build:</u> 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
Popsicle Sticks	
Masking Tape	
Straws	
Rubber Bands	
Plastic Spoons	

Test: Draw the target below and draw the location of all of your marshmal
--

How well did your catapult work?

What are two ways you can change your catapult to make it better? <u>List these ideas here, and then start over at the beginning of this sheet.</u>