

# Paper Rocket Test Report

Name: \_\_\_\_\_

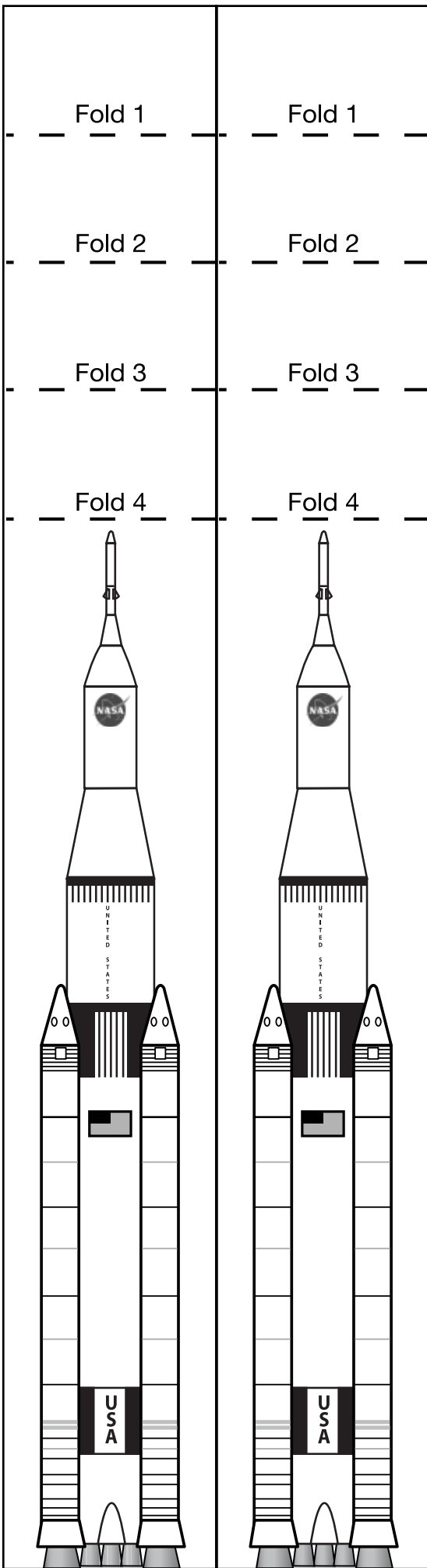
1. Launch your rocket three times at the same launch angle. Each time, measure how far it flew. Record your measurements in the data sheet below under the space labeled "Rocket 1." Calculate the average distance for the three flights.
2. *What can you do to improve the distance your rocket travels? Can you think of any improvement for your rocket?* Design and build a new rocket. Predict how far it will fly. Record your answer below in the space labeled "Rocket 2." Launch your second rocket three times and measure its distance. Record your data below. What is the difference between your predicted and actual distance? Did Rocket 2 fly farther than Rocket 1? Write your answers below.
3. *Did your changes in the rocket improve its flight?* Design and build a third rocket. Fly it the same way you did for Rockets 1 and 2. Did Rocket 3 fly farther than Rocket 2?
4. On the back of this paper, write a short paragraph describing the improvements you made to your rockets, how well they flew, and what you can conclude from your experiments. Draw pictures to illustrate how each rocket looked.

<b>ROCKET 1</b>	Flight Distance (in cm)		
	Flight 1	<input style="width: 50px; height: 20px;" type="text"/>	Make notes about the flights here.
	Flight 2	<input style="width: 50px; height: 20px;" type="text"/>	
	Flight 3	<input style="width: 50px; height: 20px;" type="text"/>	
	Average Distance	<input style="width: 50px; height: 20px;" type="text"/>	

<b>ROCKET 2</b>	Flight Distance (in cm)		
Distance Prediction	<input style="width: 50px; height: 20px;" type="text"/>	Flight 1	<input style="width: 50px; height: 20px;" type="text"/>
		Flight 2	<input style="width: 50px; height: 20px;" type="text"/>
Difference between your prediction and the average flight distance	<input style="width: 50px; height: 20px;" type="text"/>	Flight 3	<input style="width: 50px; height: 20px;" type="text"/>
		Average Distance	<input style="width: 50px; height: 20px;" type="text"/>

<b>ROCKET 3</b>	Flight Distance (in cm)		
Distance Prediction	<input style="width: 50px; height: 20px;" type="text"/>	Flight 1	<input style="width: 50px; height: 20px;" type="text"/>
		Flight 2	<input style="width: 50px; height: 20px;" type="text"/>
Difference between your prediction and the average flight distance	<input style="width: 50px; height: 20px;" type="text"/>	Flight 3	<input style="width: 50px; height: 20px;" type="text"/>
		Average Distance	<input style="width: 50px; height: 20px;" type="text"/>

**SLS Rocket Pattern for 3/8th inch dowel or fat pencils**



**SLS Rocket Pattern for 1/4 or 5/16th inch dowel or standard pencils**

