FLINN SCIENTIFIC

Name_____

Stoichiometry Balloon Races Demonstration Worksheet

Data Table

Flask	Acetic Acid		Sodium Bicarbonate		Limiting Reagent	Moles CO_2 Produced (Theoretical)
	Volume	Moles	Mass	Moles		
1	10 mL	0.020	0.50 g			
2	10 mL	0.020	1.00 g			
3	10 mL	0.020	1.50 g			
4	10 mL	0.020	2.00 g			
5	10 mL	0.020	2.50 g			
6	10 mL	0.020	3.00 g			

Discussion Questions

1. Calculate the number of moles of sodium bicarbonate that were present in each flask. Use the space below to work out the answer. Record your answer in the Data Table.

2. Write a balanced chemical equation for the reaction between sodium bicarbonate and acetic acid. Use the equation to determine the ideal mole ration for the reaction.

3. Decide which chemical was the limiting reagent, and therefore how many moles of carbon dioxide were produced, in each flask. Record your answers in the Data Table.