



Putting Chemicals Together: Student Activity Sheet

Name: _____

Date: _____

Part 1: Putting Chemicals Together

You will try to make the most gas you can by mixing a red and a green chemical. Follow the rules below.

- **For each test, the amount of red and green must add up to 20ml. No more. No less**
- Use the small (20 ml) syringe ONLY for the green solution.
- Use the large syringe ONLY for the red solution
- Always put the green solution in the bottle first, then seal the bottle and add the red solution.
- The large (60 ml) syringe always measures the volume of gas produced.

Record your data for each trail below

Trail #	Volume (ml) of Red Solution	Volume (ml) of Green Solution	Volume (ml) of Gas Produced
1			
2			
3			
4			
5			

1. What do your results tell you about the proportions of red and green reactants?

2. How could you express that without a lot of words?

Part 2: Guided Practice

Some industrious students are working to create a perfect liquid glue recipe. They mix 1 gram of G1 (a white powder) with 1 gram of Ue (a green powder) in 100ml of water and shake the mixture well. The product is a very sticky blue liquid super glue with some of the original white powder at the bottom of the mixing jar. When they pour off the glue and dry and weigh the white powder they find that it weighs .5 grams. Which of the student suggestions below might improve the recipe? Support your idea with evidence?

- a. Add more water to make more glue and dissolve the white powder better.
- b. Increase the amount of white powder.
- c. Decrease the amount of white powder by half.
- d. Shake the mixture for a longer time.
- e. Increase the amount of green powder.
