

Name: _____ Lab TA: _____

Lab Day Mon Tue(am) Tue(pm) Wed Thu(am) Thur(pm) Fri

Grade

>95 >90 >85 >80 >70 <70

Report:

Prelaboratory Quiz Score:

Data Collection and Calculations:

	Trial P	Trial 1	Trial 2	Trial 3 (if required)
1. Molarity of the NaOH solution (From Exp. 2).				
2. Tablet brand name.				
Cost per tablet..				
Mass of the Tablet.				
3. Molarity of the HCl solution (given on bottle).				
Volume of HCl added.				
Moles of HCl added.				
4. Initial buret reading.				
Final buret reading.				
Volume of NaOH added.				
Moles of NaOH added.				
5. Moles of HCl neutralized by the NaOH.				
Moles of HCl neutralized by the Tablet.				
Average moles of HCl neutralized by the Tablet.				
Average moles of HCl neutralized per gram of tablet.				
Average moles of HCl neutralized per \$1 of tablet.				

(Use Trial T for 3 & 5) Show detailed calculational method for:

3. Moles of HCl added.	5. Moles of HCl neutralized by the Tablet.

Collect the following data from another student using different brand antacid:

	Your Antacid	Colleague's Antacid
Brand Name:		
Moles of Acid neutralized per gram of tablet		

Post Laboratory Question:

Your TA will not help you with this final question.

A new 'Super-Antacid' (or so the commercial claims) just released onto the market was analyzed in a manner similar to the experiment that you just did. A single tablet weighing 0.3541g was added to 25mL of 0.981M HCl. The acid remained after the tablet had reacted required 10.31mL of 0.182M $\text{Ca}(\text{OH})_2$ to neutralize it. How many moles of acid were neutralized by the tablet. How does this new 'Super Antacid' compare to the one that you analyzed?