**Principles of Chemistry 2: Titration of Bleach Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
**Lab Section:**\_\_\_\_\_\_\_\_  
**Date:**  \_\_\_\_\_\_\_\_

***Use excess significant figures at all times unless asked to round.***

**Molar mass NaClO = 74.441713 g/mol**

|  |  |  |
| --- | --- | --- |
|  | **Trial 1** | **Trial 2** |
| **mass of KIO3 (g)** |  |  |
| **total moles of KIO3** |  |  |
| **concentration KIO3 solution (M)** |  |  |
| **volume KIO3 titrated(mL)** |  |  |
| **\*A\* moles of KIO3 titrated** |  |  |
| **Initial Burette Reading (mL)** |  |  |
| **Final Burette Reading (mL)** |  |  |
| **Volume Na2S2O3 dispensed (mL)** |  |  |
| **moles Na2S2O3 (calculated from \*A\*)** |  |  |
| **Concentration Na2S2O3 (M)** |  |  |
| **\*B\*Average Na2S2O3 concentration** |  | |

***Use excess significant figures at all times unless asked to round.***

**Molar mass NaClO = 74.441713 g/mol**

|  |  |  |
| --- | --- | --- |
|  | **Trial 1** | **Trial 2** |
| **Mass of Bleach used (g)** |  |  |
| **Initial Buret Reading (mL)** |  |  |
| **Final Buret Reading (mL)** |  |  |
| **Volume Na2S2O3 dispensed (mL)** |  |  |
| **Concentration of Na2S2O3 (use \*B\*)** |  |  |
| **\*C\* moles Na2S2O3** |  |  |
| **Moles ClO- titrated (Use \*C\* )** |  |  |
| **Mass NaClO (g) in sample** |  |  |
| **Mass % NaClO** |  |  |
| **Average Mass %  *(Round only here with correct significant figures)*** |  | |

**mass % NaClO = mass NaClO/mass bleach x 100%**

**Show your calculations neatly below. Hand written calculations are acceptable.  
(*Attach additional pages as needed*)**