Name: _____ Section: _____

Partner's Name: _____ Date: _____

VOLUMETRIC ANALYSIS OF AN ACID SOLUTION
DATA SHEET

Part A: Standardization of NaOH

Stoichiometric Equation for the Acid-Base Reaction:

Mass of oxalic acid dihydrate, $H_2C_2O_4 \cdot 2H_2O$, g _____

Number of moles of $H_2C_2O_4 \cdot 2H_2O$, mol _____

Volume of the volumetric flask, mL _____

Concentration of $H_2C_2O_4 \cdot 2H_2O$ solution, $mol \cdot L^{-1}$ _____

	Titration 1	**Titration 2**	**Titration 3**
Final burette reading, mL	_____	_____	_____
Initial burette reading, mL	_____	_____	_____
Volume of NaOH delivered, mL	_____	_____	_____
Volume of oxalic acid used, mL	_____	_____	_____
Moles of oxalic acid used, mol	_____	_____	_____
Moles of NaOH consumed, mol	_____	_____	_____
Concentration of NaOH , mol/L	_____	_____	_____
Average concentration of NaOH, $mol \cdot L^{-1}$		_____	

Part B: Determination of the unknown concentration of an HCl Solution

Stoichiometric Equation for the Acid-Base Reaction:

	Titration 1	**Titration 2**	**Titration 3**	**Titration 4** (Congo Red)
Final burette reading, mL	_____	_____	_____	_____
Initial burette reading, mL	_____	_____	_____	_____
Volume of NaOH delivered, mL	_____	_____	_____	_____
Moles of NaOH used, mol	_____	_____	_____	_____
Moles of the acid used, mol	_____	_____	_____	_____
Volume of the acid consumed, mL	_____	_____	_____	_____
Concentration of the acid, $mol \cdot L^{-1}$	_____	_____	_____	_____
Average concentration of the acid, $mol \cdot L^{-1}$			_____	