

Name: \_\_\_\_\_ Date of Lab: \_\_\_\_\_

Partner: \_\_\_\_\_

| Quantity  | Unit | Value $\pm$ Uncertainty |
|---|------|-------------------------|
| Permittivity of Free Space, $\epsilon_0$            |      |                         |
| # of turns of wire in Helmholtz Coil, $N$           |      |                         |
| Diameter of Glass Electron Tube, $D_{\text{glass}}$ |      | $\pm$                   |
| Radius of Helmholtz Coil, $R$                       |      | $\pm$                   |
| Part I: Accelerating Voltage Used                   |      | $\pm$                   |
| Part I: Slope of $1/r$ vs. $I$ graph                |      | $\pm$                   |
| Part I: $q/m$                                       | C/kg | $\pm$                   |
| Part II: Current Used                               |      | $\pm$                   |
| Part II: Slope of $r^2$ vs. $V$ graph               |      | $\pm$                   |
| Part II: $q/m$                                      | C/kg | $\pm$                   |
| Combo: Slope of $r^2$ vs. $V/I^2$ graph             |      | $\pm$                   |
| Combo: $q/m$  | C/kg | $\pm$                   |
| Accepted value for Charge-to-mass ratio             | C/kg | $\pm$                   |