Report for Experiment 12. Determination of Molar Mass Using Ideal Gas Law

|  | Trial 1 | Trial 2 |
| :--- | :--- | :--- |
| Mass of flask and cover |  |  |
| Temperature of water <br> bath at end of <br> vaporization ${ }^{\circ} \mathrm{C}$ ) |  |  |
| Temperature of water <br> bath at end of <br> vaporization (K) |  |  |
| Atmospheric pressure <br> (mmHg) |  |  |
| Atmospheric pressure <br> (atm) |  |  |
| Mass of flask, cover, <br> and gas |  |  |
| Volume of flask |  |  |
| Mass of gas |  |  |
| Calculate the moles of <br> gas from PV = nRT. |  |  |
| Calculate the molar <br> mass of gas. |  |  |


| Average molar mass of <br> gas |  |  |
| :--- | :--- | :--- |
| Percent difference <br> between the two molar <br> masses of gas |  |  |

