

NAME \_\_\_\_\_ DATE \_\_\_\_\_ SECTION \_\_\_\_\_

INSTRUCTOR \_\_\_\_\_ GRADE \_\_\_\_\_

**EXPERIMENT 7: REPORT FOR THE IDEAL GAS EQUATION:  
THE DETERMINATION OF GAS CONSTANT, R****DATA/RESULTS**

	Sample number _____		
	example	trial 1	trial 2
*1. Weight of test tube (g)	17.035	_____	_____
*2. Weight of test tube plus mixture (g)	18.480	_____	_____
3. Weight of mixture (g)	1.445	_____	_____
*4. Weight of test tube plus residue (g)	18.175	_____	_____
5. Weight of oxygen (g)	0.305	_____	_____
6. Moles of oxygen (mol)	0.00953	_____	_____
*7. Temperature of water (under oxygen)(°C)	23.0	_____	_____
*8. Temperature of gas (oxygen) (°C)	23.0	_____	_____
*9. Barometric pressure (torr)	755.0	_____	_____
10. Vapor pressure of water (torr)	21.1	_____	_____
11. Pressure of oxygen (torr)	733.9	_____	_____
*12. Volume of water displaced (L)	0.240	_____	_____
13. Gas constant, R (L•torr/mol•K)	62.4	_____	_____
14. Mass of KClO <sub>3</sub> in mixture (g)	0.779	_____	_____
15. % of KClO <sub>3</sub> in mixture (%)	53.9	_____	_____

**CALCULATIONS**

\*Numbers (items) with asterisks represent data taken in the lab, while the other numbers (items) were calculated from the lab data.