Gas Laws Formula Sheet **Name**_____

$P_1V_1 = P_2V_2$ $\frac{V_1}{T_1} = \frac{V_2}{T_2}$ $\frac{P_1V_1}{T_1} = \frac{P_2V_2}{T_2}$

$PV = nRT$ $P_T = P_1 + P_2 + P_3\ldots$

$\frac{v_1}{v_2} = \sqrt{\frac{d_2}{d_1}}$ $\frac{v_1}{v_2} = \sqrt{\frac{m_2}{m_1}}$

$R = 8.314 \frac{L \cdot kPa}{mol \cdot K}$ $R = 0.0821 \frac{L \cdot atm}{mol \cdot K}$

Water-Vapor Pressure

Temp (°C)	Pressure (mm Hg)	Pressure (kPa)
0.0	4.6	0.61
5.0	6.2	0.87
10.0	9.2	1.23
15.0	12.8	1.71
16.0	13.6	1.82
17.0	14.5	1.94
18.0	15.5	2.06
19.0	16.5	2.19
20.0	17.5	2.34
21.0	18.5	2.49
22.0	19.8	2.64
23.0	21.1	2.81

Temp (°C)	Pressure (mm Hg)	Pressure (kPa)
24.0	22.4	2.98
25.0	23.8	3.17
26.0	25.2	3.36
27.0	26.7	3.57
28.0	28.3	3.78
29.0	30.0	4.01
30.0	31.8	4.25
35.0	42.2	5.63
40.0	55.3	7.39
50.0	92.5	12.23
60.0	149.4	19.93
70.0	233.7	31.18