Gas Lab

Part 1: Pressure and volume

Increase each volume by 2 mL

|  |  |  |  |
| --- | --- | --- | --- |
|  | Volume (mL) | Pressure  (mm Hg) | Constant |
| 1 | 5 |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |

Sea level atmospheric pressure is equivalent to 760 [mm Mercury](http://en.wikipedia.org/wiki/MmHg) (Hg) or 760 [torr](http://en.wikipedia.org/wiki/Torr), or 29.92 [in Hg](http://en.wikipedia.org/wiki/InHg), 14.696 [psi](http://en.wikipedia.org/wiki/Pounds_per_square_inch), or 1 atm (atmosphere) .

Part 2: Pressure and number of particles (n)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Amount of particles (puffs) | Pressure  (Atm) | Relative Pressure (Atm \*10) | Constant |
| 1 | 0 |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |

Relative Pressure = (Pressure subtract the pressure at zero puffs) \* 10

Example: at zero puffs the pressure = 1 atm, at 1 puff P = 1.20 atm.

Relative Pressure = (1.20 – 1.00)\*10 = 1 atm