

Pressure Units ANSWER KEY

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|-------------|-------------|
| 1) 73kPa | 4) 2800mmHg |
| 2) 3.21 atm | 5) 304.5kPa |
| 3) 48.0torr | 6) 1410mmHg |

Kelvin Temp ANSWER KEY

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|-----------|------------------|
| 1) 299.0K | 5) 408K |
| 2) -173K | 6) -269°C |
| 3) 146K | 7) 706K or 433°C |
| 4) 127°C | |

Charles' Law Worksheet ANSWER KEY

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|--|-------------|
| 1) 0.47 L | 4) 1.81 L |
| 2) 0.71 L | 5) 2.35 L |
| 3) 285 mL | 6) 51,800 K |
| 7) The temperature is 298.5 K = 0.5° C. A jacket would be appropriate clothing for this weather. | |

Boyles' Law – ANSWER KEY

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|----------------------------|------------------------|
| 1) 2.11 atm | 5) 2.0×10^3 L |
| 2) 2.0×10^5 L | 6) 600 L |
| 3) 3.33×10^{-5} L | 7) 72 L |
| 4) 72.7 L | 8) $V = 0.25$ L, yes |

Avogadro's Law - Answer Key

- 1) 21.6 L
- 2) 16.8 L
- 3) 435 L
- 4) 2.59g

Dalton's Law – Answer Key

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|-----------------------------|--------------|--------------|-------------|
| 1) 9.00 atm | | | |
| 2) 1.20 atm He, 2.80 atm Ar | | | |
| 3) A. 15.00 mol | B. 19.98 mol | C. 34.98 mol | D. don't do |
| E. 0.5712 X_{He} | F. 3.00 atm | G. 4.00 atm | |

Gay-Lussac's Law – Answer key

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|---|-----------------------------|
| 1) $P_2 = 1.03$ atm. Therefore the $\Delta P = 0.03$ atm. | 6) 3.31 atm |
| 2) 0.313 atm | 7) 1.06×10^3 mm Hg |
| 3) 340.3 K (67.3 °C) | 8) 173 kPa |
| 4) 634.2 mm Hg | 9) 30.4 atm |
| 5) 317.9 K (44.9 °C) | |