

### Pressure Units ANSWER KEY

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

### Kelvin Temp ANSWER KEY

- |           |                  |
|-----------|------------------|
| 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

- |  |             |
|--|-------------|
| 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

- |                            |                        |
|----------------------------|------------------------|
| 1) 2.11 atm                | 5) $2.0 \times 10^3$ L |
| 2) $2.0 \times 10^5$ L     | 6) 600 L               |
| 3) $3.33 \times 10^{-5}$ 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

- |                             |              |              |             |
|-----------------------------|--------------|--------------|-------------|
| 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

- |   |                             |
|---|-----------------------------|
| 1) $P_2 = 1.03$ atm. Therefore the $\Delta P = 0.03$ atm. | 6) 3.31 atm                 |
| 2) 0.313 atm  | 7) $1.06 \times 10^3$ 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)                                      |                             |