# Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: \_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

# Chemistry: *Unit Conversions for the Gas Laws*

*Directions: Complete the following tables, showing your work for each lettered box beside the corresponding letter below. Include units on your work, and write your final answers in the tables.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TEMPERATURE | |  | PRESSURE | | |
| **K** | **oC** | **mm Hg** | **kPa** | **atm** |
| **373 K** | **(D)** | **890 mm Hg** | **(K)** | **(O)** |
| **(A)** | **56oC** | **(G)** | **123 kPa** | **(P)** |
| **(B)** | **154oC** | **(H)** | **(L)** | **0.64 atm** |
| **128 K** | **(E)** | **3140 mm Hg** | **(M)** | **(Q)** |
| **800 K** | **(F)** | **(I)** | **(N)** | **2.35 atm** |
| **(C)** | **–10oC** | **(J)** | **25 kPa** | **(R)** |

**(A) (J)**

**(B) (K)**

**(C) (L)**

**(D) (M)**

**(E) (N)**

**(F) (O)**

**(G) (P)**

**(H) (Q)**

**(I) (R)**

# KEY

# Chemistry: *Unit Conversions for the Gas Laws*

*Directions: Complete the following tables, showing your work for each lettered box beside the corresponding letter below. Include units on your work, and write your final answers in the tables.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TEMPERATURE | |  | PRESSURE | | |
| **K** | **oC** | **mm Hg** | **kPa** | **atm** |
| **373 K** | **(D) 100 oC** | **890 mm Hg** | **(K) 118.6 kPa** | **(O) 1.17 atm** |
| **(A) 329 K** | **56oC** | **(G) 923 mm Hg** | **123 kPa** | **(P) 1.21 atm** |
| **(B) 427 K** | **154oC** | **(H) 486 mm Hg** | **(L) 64.8 kPa** | **0.64 atm** |
| **128 K** | **(E) -145 oC** | **3140 mm Hg** | **(M) 418.5 kPa** | **(Q) 4.13 atm** |
| **800 K** | **(F) 527 oC** | **(I) 1786 mm Hg** | **(N) 238.1 kPa** | **2.35 atm** |
| **(C) 263 K** | **–10oC** | **(J) 188 mm Hg** | **25 kPa** | **(R) 0.25 atm** |

**(A) (J)**

**** 

**(B) (K)**

 

**(C) (L)**

 

**(D) (M)**

 

**(E) (N)**

 

**(F) (O)**

 

# KEY – Page 2

# Chemistry: *Unit Conversions for the Gas Laws*

**(G) (P)**

**** 

**(H) (Q)**

 

**(I) (R)**

 

# Unit Conversions for the Gas Laws

**A.**

****

**B.**



**C.**



**D.**



**E.**



**F.**



**G.**

****

**H.**



**I.**



**J.**



**K.**



**L.**



**M.**



**N.**



**O.**



**P.**



**Q.**



**R.**

