Charles’ Law

How Temperature is related to volume for a constant mass and pressure of gas.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Temperature (oC) | 0 | 20 | 40 | 60 | 80 | 100 |
| Length of air Column(cm) | 20 | 21.5 | 22.9 | 24.4 | 25.9 | 27.3 |
| Proportional to volume |
| *Use these figures to show a relationship!* |  |  |  |  |  |  |

Pressure Law

How Temperature is related to Pressure for a constant mass and volume of gas.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Temperature (oC) | 0 | 20 | 50 | 80 | 100 |
| Pressure (kPa) | 93 | 100 | 110 | 120 | 127 |
| *Use this to show a relationship!* |  |  |  |  |  |

Boyle’s Law

How Pressure is related to volume for a constant mass and temperature of gas.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Pressure (kPa) | 100 | 111 | 125 | 143 | 167 | 250 |
| volume of air column(cm3) | 50 | 45 | 40 | 35 | 30 | 20 |
| *Use the results to show a relationship* |  |  |  |  |  |  |