

## Dalton's Law of Partial Pressures

Mr. Sudbury

## Dalton's Law of Partial Pressures

- ▶ The total pressure of a mixture of gases is equal to the sum of the partial pressures of the component gases.

$$P_T = P_1 + P_2 + P_3 + \dots$$

## Dalton's Law Practice

- ▶ Three of the primary components of air are CO<sub>2</sub>, N<sub>2</sub>, & O<sub>2</sub>. In a sample containing a mixture of only these three gases at exactly 1 atm of pressure, the partial pressures of CO<sub>2</sub> and N<sub>2</sub> are given as P<sub>CO<sub>2</sub></sub> = 0.285 torr and P<sub>N<sub>2</sub></sub> = 593.5 torr. What is the partial pressure of O<sub>2</sub>?

## The End

- ▶ Dalton's Law of Partial Pressures.

