

## Gas Chemistry

What is pressure?

- Related to force
- Related to surface area
- Measured in Pascals (Pa)

What is atmospheric pressure?

- Pressure exerted by earth's atmosphere
- Greater altitude = Lower Pressure

How do we measure gas pressure?

- With a barometer.

What is the base Air Pressure?

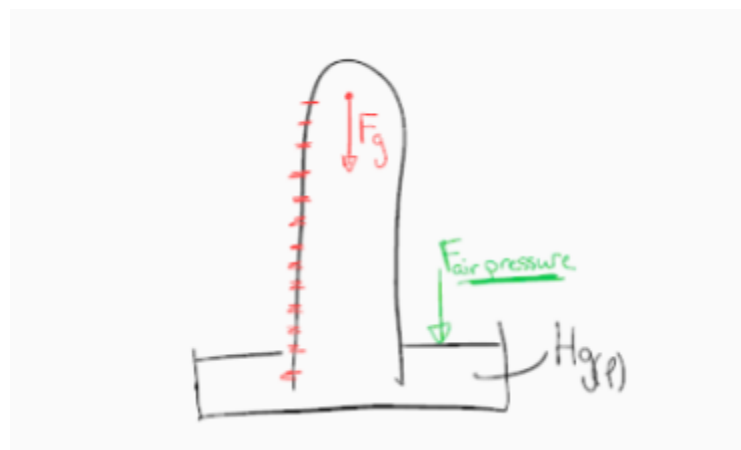
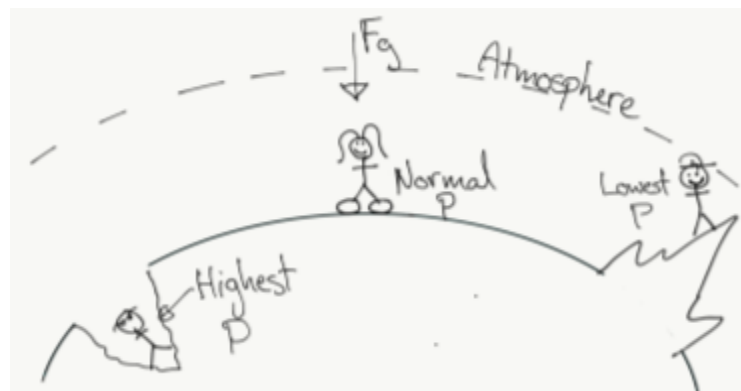
- Sea Level

$$P = \frac{F}{A}$$

$$F = \text{Force (N)}$$

$$A = \text{Area (m}^2\text{)}$$

$$P = \text{Pressure (}\frac{\text{N}}{\text{m}^2}\text{ = Pa)}$$



$$\text{If } F_g = F_A$$

- Hg(l) level is constant

$$\text{If } F_g > F_A$$

- Hg(l) level is drops

$$\text{If } F_g < F_A$$

- Hg(l) level is rises

1.000 atm (atmospheres)

760.00 mmHg (millimeters of mercury)

101.325 kPa (kilopascals)

## Boyle's Law (Scuba Diver's Law)

- External P and V are inversely proportional

