

Measuring Gas Pressure

<u>Barometer</u>	<u>Manometer</u>
- air P	- gas P
- atmospheric P	- constant

Barometer

$P_{top} = P_{atm} \text{ at sea level} = 760 \text{ mm Hg}$

Manometer

open-ended / closed-ended

Open-Ended

1) $P_{atm} = 760 \text{ mm Hg}$
 2) $760 \text{ mm Hg} - 10 \text{ mm Hg} = 750 \text{ mm Hg}$
 3) $P_{gas} = P_{atm} + \Delta h$
 $760 \text{ mm Hg} + 20 \text{ mm Hg} = 780 \text{ mm Hg}$

Closed-ended

$P_{gas} = \Delta h \text{ of col}$
 $= 10 \text{ mm Hg} - 20 \text{ mm Hg}$
 $= 30 \text{ mm Hg}$

Jan 25-10:50 AM