

KUDOS TO YOU

- KUDOS is a pneumonic device that can help you formulate a plan of attack for problems

Known: Identify what is known/given in problem

Unknown: Identify the unknown - what you're are trying to figure out

Definition: Write down the definition, formula or equation needed

Output: Find the output/answer – do the necessary calculations

Substantiate: Do a check for validity of answer, units and sig figs

KUDOS Example #1

Example: What is the partial pressure of H_2 if the total pressure of H_2O is 1.75 atm and the partial pressure of O is 0.22 atm?

Step	Source information	Write down
K	Total pressure is 1.75 atm	$P_{\text{total}} = 1.75 \text{ atm}$
	Partial pressure of O is 0.22 atm	$P_O = 0.22 \text{ atm}$
U	What is the partial pressure of H_2	Given pressures in "atm" $P_{H_2} = ? \text{ atm}$
D	Dalton's Law of Partial Pressures	$P_{\text{total}} = P_{H_2} + P_O$ Solved for P_{H_2} : $P_{H_2} = P_{\text{total}} - P_O$
O	Calculate P_{H_2}	$P_{H_2} = P_{\text{total}} - P_O$ $P_{H_2} = 1.75 \text{ atm} - 0.22 \text{ atm}$ $P_{H_2} = 1.53 \text{ atm}$
S	Check validity, units & sig figs	✓ 1.53 atm is a reasonable answer ✓ "atm" is a pressure unit ✓ 2 decimal places given → 2 in answer