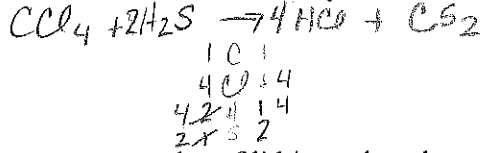
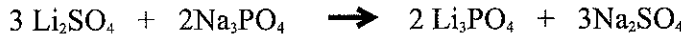


dihydrogen sulfide

17. Write and balance the following equation: Carbon tetrachloride and hydrogen disulfide undergo a single replacement reaction to form hydrochloric acid and carbon disulfide.



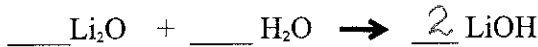
18. How many moles of lithium phosphate are produced when you have 8 moles of lithium sulfate?



8 mol Li_2SO_4	2 mol Li_3PO_4	5.3 mol Li_3PO_4
	3 mol Li_2SO_4	

$8 \text{ mol Li}_2\text{SO}_4 = ? \text{ mol Li}_3\text{PO}_4$

19. How many moles of water is needed if you want to produce 0.35 moles of lithium hydroxide?

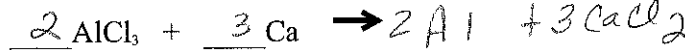


0.35 mol LiOH	1 mol H_2O
	2 mol LiOH

$0.35 \text{ mol LiOH} = ? \text{ mol H}_2\text{O}$

0.175 mol H_2O

20. How many moles of aluminum are produced when you have 4.5 grams of aluminum chloride?

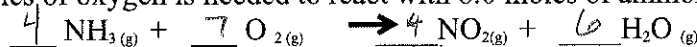


4.5g AlCl_3	1 mol AlCl_3	2 mol Al
	3 mol AlCl_3	2 mol Al

$4.5 \text{ g AlCl}_3 = ? \text{ mol Al}$

↓
- mol AlCl_3

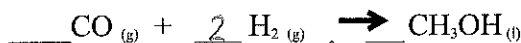
21. How many moles of oxygen is needed to react with 8.0 moles of ammonia?



8.0 mol NH_3	7 mol O_2	14 mol O_2
	4 mol NH_3	

$8.0 \text{ mol NH}_3 = ? \text{ mol O}_2$

22. How many grams of CH_3OH are produced if 3.50 moles of hydrogen are reacted with excess CO ?



3.50 mol H_2	1 mol CH_3OH	1.75 mol CH_3OH
	2 mol H_2	

$3.50 \text{ mol H}_2 = ? \text{ g CH}_3\text{OH}$

$\begin{array}{r} \text{C} \quad 12.01 \\ \text{H}_4 \quad 4.04 \\ \text{O} \quad 16.00 \\ \hline 32.05 \text{ g} \end{array}$

1.75 mol CH_3OH	32.05 g CH_3OH	56.09 g CH_3OH
	1 mol CH_3OH	