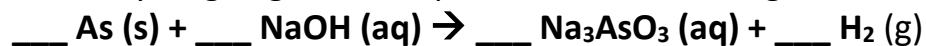


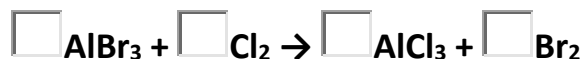
## Practice problems to do on the board for Stoichiometry Test review:

1. What is the molar mass of iodine?
2. What is the molar mass of iron?
3. What is the molar mass of iron II chloride,  $\text{FeCl}_2$ ?
4. How many moles are in 3.74 grams of  $\text{PCl}_3$ ?
5. How many molecules are in 3.74 grams of phosphorus trichloride,  $\text{PCl}_3$ ?
6. How many liters are in 0.75 moles of oxygen gas?
7. How many grams of methane,  $\text{CH}_4$ , would be contained in a 5.00 L flask?
8. What is the mole ratios for this reaction?  **$4 \text{ Al} + 3 \text{ O}_2 \rightarrow 2 \text{ Al}_2\text{O}_3$**
9. How many moles of oxygen gas are required to produce 8 moles of  $\text{Al}_2\text{O}_3$ ?
10. How many grams of water are required to react with 15.0 grams of tetraphosphorus decaoxide?  **$\text{P}_4\text{O}_{10} (\text{s}) + \text{H}_2\text{O} (\text{l}) \rightarrow \text{H}_3\text{PO}_4 (\text{aq})$**

11. How many liters of hydrogen gas can be produced from 100.0 grams of arsenic?



12. How many milliliters of hydrogen gas are required to react with 25.0 moles of nitrogen gas?



13. Find the limiting reactant if you start with 12.0 grams of each reactant.

14. What is the theoretical yield?

15. What is the percent yield if only \_\_\_\_\_ grams are produced in the lab?

16. How much excess reactant is left over?