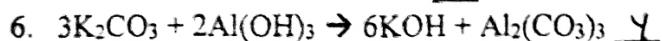
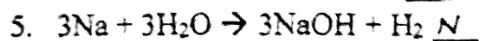
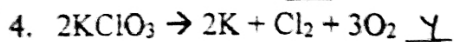
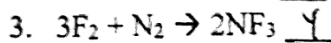
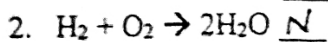
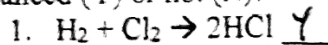


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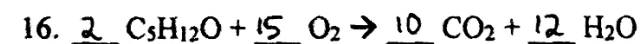
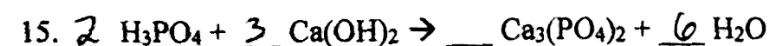
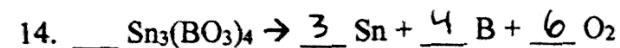
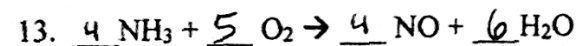
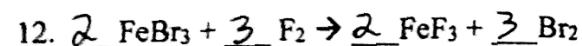
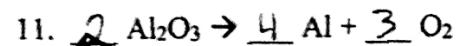
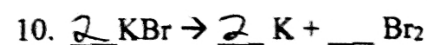
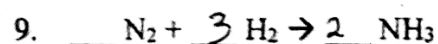
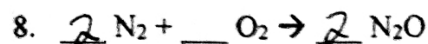
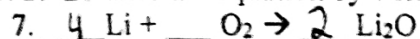
Date:

Period: 6.4 Tracked Assignment (Obj 2; 4)

Part 1: Check the number of atoms of each element on each side and determine whether the equation is balanced (Y) or not (N):



Part 2: Balance the equation by writing in the coefficients (lowest whole numbers).

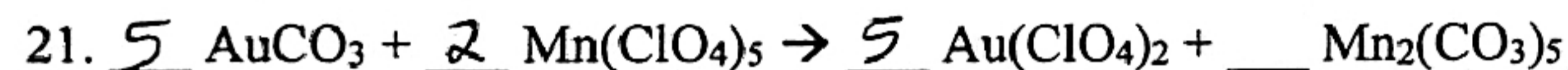
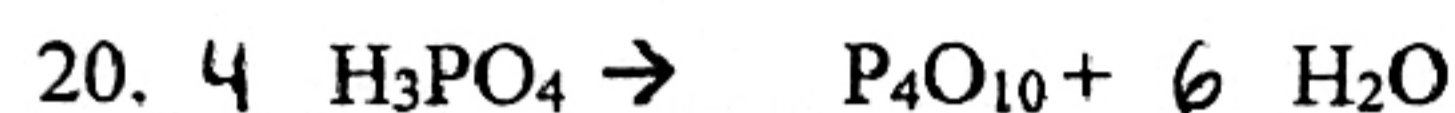
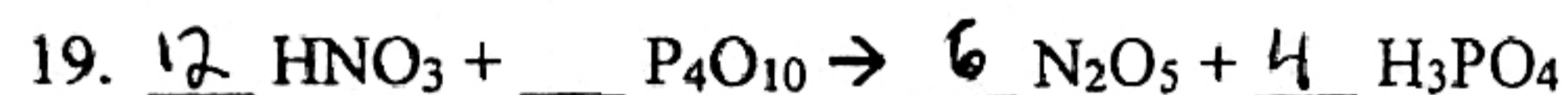
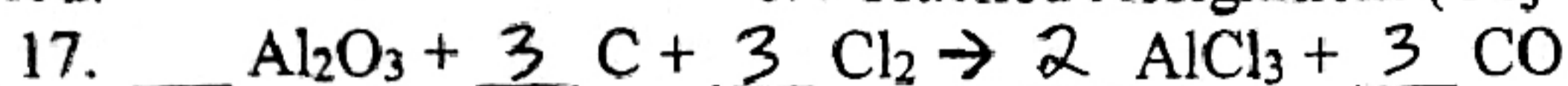


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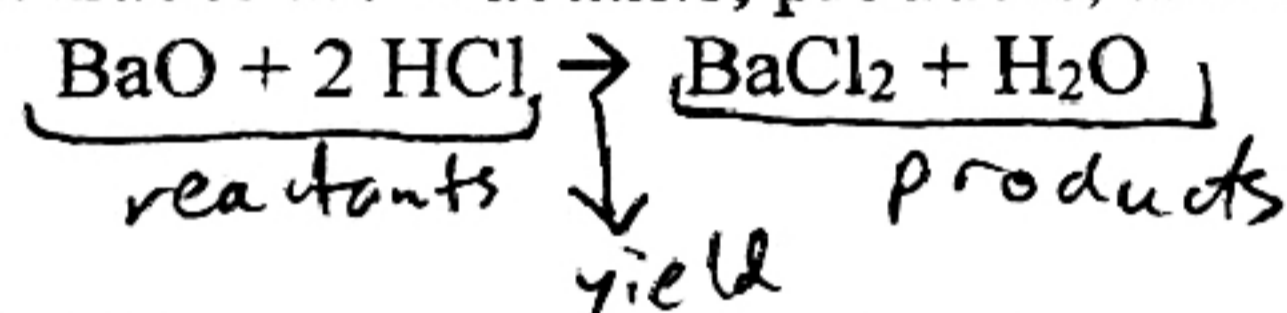
Period:

6.4 Tracked Assignment (Obj 2; 4)



Part 3: Answer the following question. SHOW WORK on calculations to receive credit.

22. Label the reactants, products, and the part of the equation that represents yield for this reaction:



23. Why do equations need to be balance?

to follow law of conservation of mass / mass cannot be created or destroyed

24. Explain how this equation is violating the Law of Conservation of Mass: $\text{K} + \text{S} \rightarrow \text{K}_2\text{S}$.

created a K from left to right

25. A student performed the following reaction: $\text{MgCl}_2 \rightarrow \text{Mg} + \text{Cl}_2$

If the student collected 49g Mg and 142 g of Cl_2 , how many grams of MgCl_2 did the student start with?

$$49\text{g} + 142\text{g} = \boxed{191\text{g MgCl}_2}$$

26. A student performed the following reaction: $3 \text{H}_2\text{SO}_4 + 2 \text{Fe}(\text{OH})_3 \rightarrow \text{Fe}_2(\text{SO}_4)_3 + 6 \text{H}_2\text{O}$
147 g 160 g 200 g

How many grams of water would be produced?

$$147\text{g} + 160\text{g} = 200\text{g} + x$$
$$x = 147 + 160 - 200 = \boxed{107\text{g H}_2\text{O}}$$

27. A student performed the following reaction: $\text{Mg} + 2 \text{AgNO}_3 \rightarrow 2 \text{Ag} + \text{Mg}(\text{NO}_3)_2$
849.4 g 539.4 g 370.8 g

How much Mg reacted?

$$x + 849.4\text{g} = 539.4\text{g} + 370.8\text{g}$$
$$x = 539.4 + 370.8 - 849.4 = \boxed{60.8\text{g Mg}}$$