

Chemical Reactions Test Review

Use this review as a practice. These exact questions will not be asked, but the concepts reviewed here will be tested. Remember to make a cheat sheet that will help you on your test. You will get the periodic table and the polyatomic ion chart. This review will be a stamp grade. Be prepared to turn it in right before the test.

1. What is the law of conservation of mass?
2. How does the law of conservation of mass apply to chemical reactions?
3. In the reaction for the formation of magnesium phosphide, you create 250 grams of magnesium phosphide. $\text{Mg} + \text{P} \rightarrow \text{Mg}_3\text{P}_2$ Use the law of conservation of mass to tell the mass of the reactants and explain how you know the mass of the reactants.

Know the symbols for these things in chemical reactions.

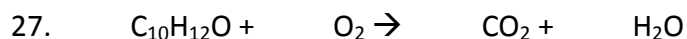
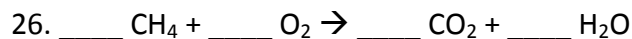
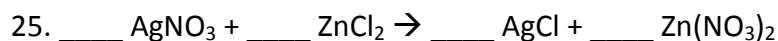
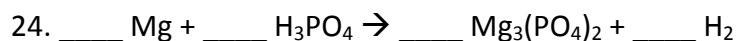
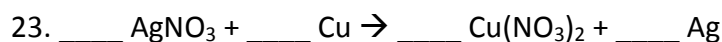
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|---------------------|-------------------------|
| 4. Solid | 8. Yields, or forms |
| 5. Liquid | 9. Heat was added |
| 6. Aqueous solution | 10. Reversible reaction |
| 7. Gas | |

Know the diatomic elements, and how to write them in a reaction.

Be able to identify reaction types. (*Writing the generic forms may help you identify types, $A + B \rightarrow AB$ is synthesis.*)

11. $\text{HCl} + \text{Zn} \rightarrow \text{ZnCl}_2 + \text{H}_2$ _____
12. $\text{H}_2\text{CO}_3 \rightarrow \text{H}_2\text{O} + \text{CO}_2$ _____
13. $\text{H}_2\text{SO}_4 + \text{KOH} \rightarrow \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$ _____
14. $\text{C}_3\text{H}_8 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$ _____
15. $\text{Al} + \text{CuCl}_2 \rightarrow \text{AlCl}_3 + \text{Cu}$ _____
16. $\text{H}_2\text{O}_2 \rightarrow \text{H}_2\text{O} + \text{O}_2$ _____
17. $\text{HCl} + \text{KOH} \rightarrow \text{KCl} + \text{H}_2\text{O}$ _____
18. $\text{Mg} + \text{F}_2 \rightarrow \text{MgF}_2$ _____
19. What are the reactants and products of a complete combustion reaction?
20. What are the reactants and products of an incomplete combustion reaction?

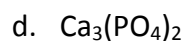
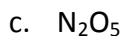
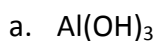
Be able to balance chemical reactions.



Old information that is still relevant:

28. Which is a molecule and why? (NaCl or N₂O₅)

29. How would you name the following?



30. Write the following formulas.

a. Calcium oxide

b. Trinitrogen pentoxide

c. Magnesium sulfate

d. Phosphoric acid

31. Be able to translate a formula into words.

a. Hydrogen plus oxygen form water

b. Magnesium added to phosphoric acid forms magnesium phosphate and hydrogen.

c. Write the synthesis reaction for the formation of NH₃

d. Write the single replacement reaction that occurs when you combine solid aluminum with iron (III) oxide.