

Write and balance the following equations. In the space in front of each problem, write the type of reaction (DR, SR, D, or S).

- _____ 1. Iron plus water causes hydrogen gas and iron III oxide, a solid to form.
- _____ 2. Sodium peroxide (Na_2O_2), a solid, plus water gives sodium hydroxide and oxygen gas.
- _____ 3. Iron III chloride crystals when mixed with ammonium hydroxide gives iron III hydroxide and ammonium chloride.
- _____ 4. Potassium chlorate decomposes into potassium chloride and oxygen gas.
- _____ 5. Silver nitrate plus sodium bromide gives sodium nitrate and silver bromide.
- _____ 6. Iron and sulfur when heated gives iron II sulfide.
- _____ 7. Calcium sulfate and sodium carbonate will yield calcium carbonate and sodium sulfate.
- _____ 8. Sulfuric acid plus potassium hydroxide gives potassium sulfate and water.
- _____ 9. Potassium iodide when mixed with chlorine gas will give potassium chloride and iodine gas.
- _____ 10. Hydrogen sulfide gas plus oxygen gas gives water and sulfur.
- _____ 11. Carbon plus oxygen gives carbon dioxide.
- _____ 12. Aluminum can be added to hydrochloric acid to give aluminum chloride and hydrogen gas.
- _____ 13. Cupric sulfate plus iron will give ferrous sulfate and copper.
- _____ 14. Hydrochloric acid when mixed with ammonia gas gives ammonium chloride
- _____ 15. Lead II hydroxide decomposes to water and lead II oxide.
- _____ 16. Sodium nitrate can be broken down into sodium nitrite and oxygen gas.
- _____ 17. Iron when left out in the air with oxygen gas causes iron III oxide to form.
- _____ 18. Zinc sulfide plus oxygen gas gives zinc oxide solid and sulfur dioxide gas.
- _____ 19. Zinc plus silver iodide gives zinc iodide plus silver.
- _____ 20. Ferric chloride plus sulfuric acid gives ferric sulfate and hydrochloric acid.