

Equations Practice Sheet 1

Directions: Write the correct formula for each compound or element in the following word equation and then balance according to the Law of Conservation of Mass. Indicate, to the left of the number, the type of reaction each represents. (Use S, D, R and I rather than the name.)

1. acetic acid + barium hydroxide \longrightarrow barium acetate + water



2. zinc + sulfuric acid \longrightarrow zinc sulfate + hydrogen



3. calcium bicarbonate (heated) \longrightarrow calcium carbonate + carbon dioxide + water



4. barium chloride + aluminum sulfate \longrightarrow barium sulfate + aluminum chloride



5. diphosphorus pentoxide + water \longrightarrow phosphoric acid



6. chlorine + sodium bromide \longrightarrow sodium chloride + bromine



7. copper(II) oxide + hydrogen \longrightarrow copper + water



8. tin(IV) chlorate + heat \longrightarrow tin(IV) chloride + oxygen



9. iron(III) chloride + ammonium sulfide \longrightarrow ammonium chloride + iron(III) sulfide



10. potassium hydroxide + carbon dioxide \longrightarrow potassium carbonate + water



11. phosphorus + iodine \longrightarrow phosphorus triiodide



12. calcium carbonate + hydrochloric acid \longrightarrow calcium chloride + carbon dioxide + water



13. lead(II) nitrate + sodium carbonate \longrightarrow lead(II) carbonate + sodium nitrate



14. aluminum + mercuric nitrate \longrightarrow aluminum nitrate + mercury



15. phosphoric acid + calcium hydroxide \longrightarrow calcium phosphate + water



16. copper(II) sulfide + oxygen \longrightarrow copper(II) oxide + sulfur dioxide



17. antimony + chlorine \longrightarrow antimony trichloride



18. potassium + water \longrightarrow potassium hydroxide + hydrogen



19. iron(III) oxide + aluminum \longrightarrow aluminum oxide + iron



20. sodium sulfite + acetic acid \longrightarrow sodium acetate + sulfur dioxide + water



21. mercury(II) oxide (heated) \longrightarrow mercury + oxygen



22. hydrogen + chlorine \longrightarrow hydrogen chloride



23. silver nitrate + aluminum chloride \longrightarrow silver chloride + aluminum nitrate

