

## Review Exercise 5 - Answers



### A.

|                                           |                                                     |                                           |                             |
|-------------------------------------------|-----------------------------------------------------|-------------------------------------------|-----------------------------|
| 1. $\text{CaBr}_2$                        | Calcium Bromide                                     | 21. $\text{LiCl}$                         | Lithium chloride            |
| 2. $\text{Cr}_2\text{O}_3$                | Chromium(III) oxide                                 | 22. $\text{H}_2\text{SO}_{4(\text{aq})}$  | Sulfuric acid               |
| 3. $\text{PCl}_3$                         | Phosphorus trichloride                              | 23. $\text{TiO}_2$                        | Titanium(IV) oxide          |
| 4. $\text{NaHCO}_3$                       | Sodium hydrogen carbonate, or<br>Sodium bicarbonate | 24. $\text{N}_2\text{O}$                  | Dinitrogen monoxide         |
| 5. $\text{NH}_4\text{OH}$                 | Ammonium hydroxide                                  | 25. $\text{H}_2\text{O}_2$                | Hydrogen peroxide           |
| 6. $\text{K}_2\text{SO}_4$                | Potassium sulfate                                   | 26. $\text{Ca}_3(\text{PO}_3)_2$          | Calcium phosphite           |
| 7. $\text{NaClO}_2$                       | Sodium chlorite                                     | 27. $\text{HCl}_{(\text{aq})}$            | Hydrochloric acid           |
| 8. $\text{NaIO}$                          | Sodium hypoiodite                                   | 28. $\text{OCl}_2$                        | Oxygen dichloride           |
| 9. $\text{CCl}_4$                         | Carbon tetrachloride                                | 29. $(\text{NH}_4)_2\text{S}$             | Ammonium sulfide            |
| 10. $\text{HI}_{(\text{aq})}$             | Hydroiodic acid                                     | 30. $\text{Fe}_2\text{O}_3$               | Iron(III) oxide             |
| 11. $\text{K}_2\text{O}_2$                | Potassium peroxide                                  | 31. $\text{CuNO}_3$                       | Copper(I) nitrate           |
| 12. $\text{AlCl}_3$                       | Aluminum Chloride                                   | 32. $\text{H}_2\text{SO}_3_{(\text{aq})}$ | Sulfurous acid              |
| 13. $\text{H}_3\text{PO}_4_{(\text{aq})}$ | Phosphoric acid                                     | 33. $\text{NaOH}$                         | Sodium hydroxide            |
| 14. $\text{CuSO}_4$                       | Copper(II) sulfate                                  | 34. $\text{MnO}$                          | manganese(II) oxide         |
| 15. $\text{Li}_2\text{SiO}_3$             | Lithium silicate                                    | 35. $\text{N}_2\text{O}_4$                | Dinitrogen tetroxide        |
| 16. $\text{Ba}(\text{OH})_2$              | Barium hydroxide                                    | 36. $\text{H}_2\text{O}$                  | Dihydrogen monoxide (water) |
| 17. $\text{NH}_{3(\text{g})}$             | Nitrogen trihydride (ammonia)                       | 37. $\text{P}_4$                          | Phosphorus                  |
| 18. $\text{Al}_2(\text{SO}_4)_3$          | Aluminum sulfate                                    | 38. $\text{H}_2\text{S}_{(\text{aq})}$    | Hydrosulfuric acid          |
| 19. $\text{CaF}_2$                        | calcium fluoride                                    | 39. $\text{HBr}_{(\text{g})}$             | Hydrogen bromide (gas)      |
| 20. $\text{P}_2\text{O}_5$                | Diphosphorus pentoxide                              | 40. $\text{Sn}(\text{Cr}_2\text{O}_7)_2$  | Tin(IV) dichromate          |

### B.

|                                |                                      |                          |                              |
|--------------------------------|--------------------------------------|--------------------------|------------------------------|
| 1. aluminum sulphide           | $\text{Al}_2\text{S}_3$              | 21. ammonium phosphate   | $(\text{NH}_4)_3\text{PO}_4$ |
| 2. iron(II) fluoride           | $\text{FeF}_2$                       | 22. aluminum chloride    | $\text{AlCl}_3$              |
| 3. tetraphosphorus hexoxide    | $\text{P}_4\text{O}_6$               | 23. sodium thiocyanate   | $\text{NaSCN}$               |
| 4. potassium permanganate      | $\text{KMnO}_4$                      | 24. hydrofluoric acid    | $\text{HF}_{(\text{aq})}$    |
| 5. calcium hydroxide           | $\text{Ca}(\text{OH})_2$             | 25. silicon dioxide      | $\text{SiO}_2$               |
| 6. strontium nitrate           | $\text{Sr}(\text{NO}_3)_2$           | 26. nitrogen gas         | $\text{N}_2$                 |
| 7. ammonium hydrogen carbonate | $\text{NH}_4\text{HCO}_3$            | 27. lithium borate       | $\text{Li}_3\text{BO}_3$     |
| 8. hydrogen gas                | $\text{H}_2$                         | 28. aluminum fluoride    | $\text{AlF}_3$               |
| 9. nitrogen trihydride         | $\text{NH}_3$                        | 29. barium sulfate       | $\text{BaSO}_4$              |
| 10. boric acid                 | $\text{H}_3\text{BO}_{3(\text{aq})}$ | 30. strontium oxide      | $\text{SrO}$                 |
| 11. hydrogen sulfide           | $\text{H}_2\text{S}(\text{g})$       | 31. lithium peroxide     | $\text{Li}_2\text{O}_2$      |
| 12. lithium periodate          | $\text{LiIO}_4$                      | 32. nitric acid          | $\text{HNO}_{3(\text{aq})}$  |
| 13. periodic acid              | $\text{HIO}_{4(\text{aq})}$          | 33. carbon tetrafluoride | $\text{CF}_4$                |
| 14. potassium oxalate          | $\text{K}_2\text{Oxalate}$           | 34. iron(III) carbonate  | $\text{Fe}_2(\text{CO}_3)_3$ |
| 15. calcium carbonite          | $\text{CaCO}_2$                      | 35. diarsenic trisulfide | $\text{As}_2\text{S}_3$      |
| 16. carbon tetrachloride       | $\text{CCl}_4$                       | 36. tin(IV) silicate     | $\text{Sn}(\text{SiO}_3)_2$  |
| 17. boron tetrahydride         | $\text{BH}_4$                        | 37. Oxygen gas           | $\text{O}_2$                 |
| 18. lead(IV) sulfide           | $\text{PbS}_2$                       | 38. natural gas          | $\text{CH}_4$                |
| 19. ammonium sulfate           | $(\text{NH}_4)_2\text{SO}_4$         | 39. sodium hypoiodite    | $\text{NaIO}$                |
| 20. antimony(III) permanganate | $\text{Sb}(\text{MnO}_4)_3$          | 40. strontium nitride    | $\text{Sr}_3\text{N}_2$      |