

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_

## Chemistry – Unit 2 Test Review

Name the following.

Write the formulas.

- |   |  |
|---|--|
| 1) $\text{Na}_2\text{SO}_4$ Sodium Sulfate      | 11) $\text{Li}_2\text{CO}_3$ Lithium Carbonate       |
| 2) $\text{Fe}_2\text{N}_2$ Iron III Nitride     | 12) $\text{FeBr}_2$ Iron II Bromide                  |
| 3) $\text{HClO}_4$ Perchloric Acid              | 13) $\text{HClO}_4$ Perchloric Acid                  |
| 4) $\text{N}_2\text{O}_3$ Dinitrogen Trioxide   | 14) $\text{S}_2\text{O}_5$ Disulfur Pentoxide        |
| 5) $\text{HF}$ Hydrofluoric Acid                | 15) $\text{Ca}_3(\text{AsO}_4)_2$ Calcium Arsenate   |
| 6) $\text{K}_3\text{PO}_4$ Potassium Phosphate  | 16) $\text{Ag}_3\text{PO}_3$ Silver Phosphite        |
| 7) $\text{Pb}(\text{CO}_3)_2$ Lead II Carbonate | 17) $\text{Fe}_2\text{Se}_3$ Iron III Selenide       |
| 8) $\text{H}_3\text{AsO}_4$ Arsenic Acid        | 18) $\text{H}_2\text{CrO}_4$ Chromic Acid            |
| 9) $\text{S}_4\text{O}_5$ Tetrasulfur Pentoxide | 19) $\text{Si}_3\text{O}_4$ Trisilicon Tetroxide     |
| 10) $\text{H}_2\text{CO}_3$ Carbonic Acid       | 20) $\text{Mg}_3(\text{PO}_4)_2$ Magnesium Phosphate |

Balance the following equations.

- 21)  $2 \text{Fe} + 3 \text{H}_2\text{SO}_4 \rightarrow \text{Fe}_2(\text{SO}_4)_3 + 3 \text{H}_2$
- 22)  $2 \text{C}_2\text{H}_6 + 7 \text{O}_2 \rightarrow 6 \text{H}_2\text{O} + 4 \text{CO}_2$
- 23)  $3 \text{KOH} + \text{H}_3\text{PO}_4 \rightarrow \text{K}_3\text{PO}_4 + 3 \text{H}_2\text{O}$
- 24)  $\text{SnO}_2 + 2 \text{H}_2 \rightarrow \text{Sn} + 2 \text{H}_2\text{O}$
- 25)  $4 \text{NH}_3 + 5 \text{O}_2 \rightarrow 4 \text{NO} + 6 \text{H}_2\text{O}$
- 26)  $2 \text{KNO}_3 + \text{H}_2\text{CO}_3 \rightarrow \text{K}_2\text{CO}_3 + 2 \text{HNO}_3$
- 27)  $\text{B}_2\text{Br}_6 + 6 \text{HNO}_3 \rightarrow 2 \text{B}(\text{NO}_3)_3 + 6 \text{HBr}$
- 28)  $2 \text{BF}_3 + 3 \text{Li}_2\text{SO}_3 \rightarrow \text{B}_2(\text{SO}_3)_3 + 6 \text{LiF}$
- 29)  $4 (\text{NH}_4)_3\text{PO}_4 + 3 \text{Pb}(\text{NO}_3)_4 \rightarrow \text{Pb}_3(\text{PO}_4)_4 + 12 \text{NH}_4\text{NO}_3$
- 30)  $\text{SeCl}_6 + \text{O}_2 \rightarrow \text{SeO}_2 + 3 \text{Cl}_2$

Write and balance the following reactions. Identify the type of reaction.

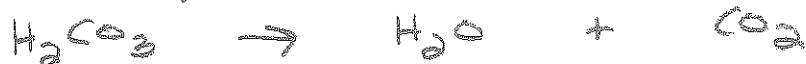
31) Silver sulfate combines with boron bromide to produce silver bromide and boron sulfate.

\* Double Replacement



32) Carbonic acid decomposes to water and carbon dioxide.

\* Decomposition



33) Phosphorous and chlorine produce phosphorous trichloride.

\* Synthesis



35) Zinc chloride and hydrogen are produced when zinc and hydrochloric acid react.

\* Single Replacement

