

Name: \_\_\_\_\_

Hour: \_\_\_\_\_ Date: \_\_\_\_\_

## Chemistry: *Empirical and Molecular Formulas*

Write the empirical formula for each of the following molecular formulas.

- |  |           |
|--|-----------|
| 1. $\text{N}_2\text{O}_4$                    | 1. _____  |
| 2. $\text{NO}_2$                             | 2. _____  |
| 3. $\text{C}_2\text{H}_6$                    | 3. _____  |
| 4. $\text{CH}_4$                             | 4. _____  |
| 5. $\text{C}_6\text{H}_{12}\text{O}_6$       | 5. _____  |
| 6. $\text{H}_2\text{SO}_4$                   | 6. _____  |
| 7. $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ | 7. _____  |
| 8. $\text{C}_2\text{H}_2$                    | 8. _____  |
| 9. $\text{C}_2\text{H}_4\text{O}_2$          | 9. _____  |
| 10. $\text{Hg}_2(\text{NO}_3)_2$             | 10. _____ |

Write 2 molecular formulas that reduce to each of the given empirical formulas. Do not include the given empirical formulas as answers.

- |                                       |           |
|---------------------------------------|-----------|
| 11. HO                                | 11. _____ |
| 12. $\text{CS}_2$                     | 12. _____ |
| 13. $\text{Na}_3\text{N}$             | 13. _____ |
| 14. $\text{Al}_2(\text{SO}_4)_3$      | 14. _____ |
| 15. $\text{CH}_2\text{O}$             | 15. _____ |
| 16. $\text{Cr}(\text{CN})_3$          | 16. _____ |
| 17. CsCl                              | 17. _____ |
| 18. $\text{UF}_6$                     | 18. _____ |
| 19. $\text{K}_2\text{Cr}_2\text{O}_7$ | 19. _____ |
| 20. $\text{KMnO}_4$                   | 20. _____ |