

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

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

## Chemistry: *Empirical and Molecular Formulas*

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

- |                         |           |
|-------------------------|-----------|
| 1. $N_2O_4$             | 1. _____  |
| 2. $NO_2$               | 2. _____  |
| 3. $C_2H_6$             | 3. _____  |
| 4. $CH_4$               | 4. _____  |
| 5. $C_6H_{12}O_6$       | 5. _____  |
| 6. $H_2SO_4$            | 6. _____  |
| 7. $C_{12}H_{22}O_{11}$ | 7. _____  |
| 8. $C_2H_2$             | 8. _____  |
| 9. $C_2H_4O_2$          | 9. _____  |
| 10. $Hg_2(NO_3)_2$      | 10. _____ |

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

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|--------------------|-----------|
| 11. HO             | 11. _____ |
| 12. $CS_2$         | 12. _____ |
| 13. $Na_3N$        | 13. _____ |
| 14. $Al_2(SO_4)_3$ | 14. _____ |
| 15. $CH_2O$        | 15. _____ |
| 16. $Cr(CN)_3$     | 16. _____ |
| 17. CsCl           | 17. _____ |
| 18. $UF_6$         | 18. _____ |
| 19. $K_2Cr_2O_7$   | 19. _____ |
| 20. $KMnO_4$       | 20. _____ |