

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

Block: \_\_\_\_\_

## Temperature & Matter

Convert each of the following temperatures:

1.  $27^{\circ}\text{C} = \text{_____ K}$
2.  $77\text{ K} = \text{_____ }^{\circ}\text{C}$
3.  $85^{\circ}\text{C} = \text{_____ K}$
4.  $1020\text{ K} = \text{_____ }^{\circ}\text{C}$

For each of the following changes, state whether the change is chemical or physical.

- |                                |                                     |
|--------------------------------|-------------------------------------|
| 5. water boiling               | 10. burning a piece of paper        |
| 6. iron rusting                | 11. making crushed ice in a blender |
| 7. cooking an egg              | 12. garbage turning into compost    |
| 8. breaking glass              | 13. leaves changing color           |
| 9. tearing up a piece of paper |                                     |

Classify the each of the following types of matter as a heterogenous mixture, homogeneous mixture, compound, or element.

- |   |   |
|---|---|
| 14. pure water ( $\text{H}_2\text{O}$ ) | 20. carbonated soda                                 |
| 15. helium                              | 21. ice water (pure $\text{H}_2\text{O}$ )          |
| 16. chocolate-chip cookies              | 22. aluminum  |
| 17. salt water                          | 23. chicken noodle soup                             |
| 18. orange juice                        | 24. chicken broth                                   |
| 19. 14-karat gold                       | 25. glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) |