

Name: \_\_\_\_\_ Grade/Group: \_\_\_\_\_

Subject: Chemistry – Teacher: Mrs. McNeal

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

### Classification of Matter

**Instructions:** Write **E** in the blank if the material is *heterogeneous* or **O** if it is *homogeneous*.

- |                                |       |                               |       |
|--------------------------------|-------|-------------------------------|-------|
| 1. Wood                        | _____ | 5. Salt                       | _____ |
| 2. Freshly-brewed black coffee | _____ | 6. Dirt                       | _____ |
| 3. Water                       | _____ | 7. Sausage-and-mushroom pizza | _____ |
| 4. Lucky charms                | _____ | 8. Milk                       | _____ |

**Instructions:** Classify each of the following as an *element* [**E**], *compound* [**C**], or *mixture* [**M**].

- |                        |       |                    |       |
|------------------------|-------|--------------------|-------|
| 9. Gold                | _____ | 14. Air            | _____ |
| 10. Water              | _____ | 15. Carbon dioxide | _____ |
| 11. Seawater           | _____ | 16. Silver         | _____ |
| 12. Sugar              | _____ | 17. Ice            | _____ |
| 13. A chocolate sundae | _____ | 18. A Big Mac      | _____ |

**Instructions:** Classify each of the following properties of matter as *physical* [**P**] or *chemical* [**C**].

- |                              |       |                                    |       |
|------------------------------|-------|------------------------------------|-------|
| 19. Color                    | _____ | 24. Reacts violently with chlorine | _____ |
| 20. Density                  | _____ | 25. Good conductor of heat         | _____ |
| 21. Burns easily (flammable) | _____ | 26. Dissolves readily in water     | _____ |
| 22. Not affected by acids    | _____ | 27. Melts at 145 degrees C         | _____ |
| 23. Boils at 450 degrees C   | _____ | 28. Malleable                      | _____ |

**Instructions:** Classify each of the following changes as *physical* [**P**] or *chemical* [**C**].

- |                                 |       |                                |       |
|---------------------------------|-------|--------------------------------|-------|
| 29. Grinding chalk into powder  | _____ | 33. Burning gasoline           | _____ |
| 30. Dissolving salt in water    | _____ | 34. Hammering gold into foil   | _____ |
| 31. Tearing a piece of paper    | _____ | 35. Digesting food             | _____ |
| 32. Stretching copper into wire | _____ | 36. Making hydrogen from water | _____ |