

NAME \_\_\_\_\_

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

- |                                |       |                               |       |
|--------------------------------|-------|-------------------------------|-------|
| 1. Wood                        | _____ | 6. Dirt                       | _____ |
| 2. Freshly-brewed black coffee | _____ | 7. Sausage-and-mushroom pizza | _____ |
| 3. Water                       | _____ | 8. Air                        | _____ |
| 4. Lucky Charms <sup>®</sup>   | _____ | 9. Milk                       | _____ |
| 5. Salt                        | _____ | 10. Gold                      | _____ |

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

- |                        |       |                            |       |
|------------------------|-------|----------------------------|-------|
| 11. Gold               | _____ | 16. Air                    | _____ |
| 12. Water              | _____ | 17. Carbon dioxide         | _____ |
| 13. Seawater           | _____ | 18. Silver                 | _____ |
| 14. Sugar              | _____ | 19. Ice                    | _____ |
| 15. A chocolate sundae | _____ | 20. A Big Mac <sup>®</sup> | _____ |

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

- |                              |       |                                    |       |
|------------------------------|-------|------------------------------------|-------|
| 21. Color                    | _____ | 26. Reacts violently with chlorine | _____ |
| 22. Density                  | _____ | 27. Good conductor of heat         | _____ |
| 23. Burns easily (flammable) | _____ | 28. Dissolves readily in water     | _____ |
| 24. Not affected by acids    | _____ | 29. Melts at 145 °C                | _____ |
| 25. Boils at 450 °C          | _____ | 30. Malleable                      | _____ |

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

- |                                 |       |                                |       |
|---------------------------------|-------|--------------------------------|-------|
| 31. Grinding chalk into powder  | _____ | 36. Burning gasoline           | _____ |
| 32. Dissolving salt in water    | _____ | 37. Hammering gold into foil   | _____ |
| 33. Dissolving zinc in acid     | _____ | 38. Melting ice                | _____ |
| 34. Tearing a piece of paper    | _____ | 39. Digesting food             | _____ |
| 35. Stretching copper into wire | _____ | 40. Making hydrogen from water | _____ |

INSTRUCTIONS: Classify each of the following as an *intensive property* [I] or an *extensive property* [E].

- |                   |       |            |       |
|-------------------|-------|------------|-------|
| 41. Mass          | _____ | 46. Color  | _____ |
| 42. Density       | _____ | 47. Volume | _____ |
| 43. Melting point | _____ | 48. Length | _____ |