

NAME \_\_\_\_\_

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

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

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

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

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

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

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

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

**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 | _____ |