

Classification of Matter

NAME _____

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

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|---|----------|---|----------|
| 1. Sulfur (S) | <u>E</u> | 6. Argon (Ar) | <u>E</u> |
| 2. Water (H ₂ O) | <u>C</u> | 7. Carbon dioxide (CO ₂) | <u>C</u> |
| 3. Limestone (CaCO ₃) | <u>C</u> | 8. Silver (Ag) | <u>E</u> |
| 4. Nitrogen (N ₂) | <u>E</u> | 9. Benzene (C ₆ H ₆) | <u>C</u> |
| 5. Acetylene (C ₂ H ₂) | <u>C</u> | 10. Baking Soda (NaHCO ₃) | <u>C</u> |

INSTRUCTIONS: Classify each of the following of as *pure substances* [P] or *mixtures* [M].

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|--------------|----------|------------------|----------|
| 11. Mercury | <u>P</u> | 16. concrete | <u>M</u> |
| 12. gasoline | <u>M</u> | 17. Orange juice | <u>M</u> |
| 13. Oxygen | <u>P</u> | 18. brass | <u>M</u> |
| 14. Gold | <u>P</u> | 19. Tap water | <u>M</u> |
| 15. Iced Tea | <u>M</u> | 20. Magnesium | <u>P</u> |

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

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|---------------------------------|----------|--------------------------------|-------------|
| 21. Wood | <u>E</u> | 26. Dirt | <u>E</u> |
| 22. Freshly-brewed black coffee | <u>O</u> | 27. Sausage-and-mushroom pizza | <u>E</u> |
| 23. Chex Mix | <u>E</u> | 28. Air | <u>O</u> |
| 24. Lucky Charms [®] | <u>E</u> | 29. Milk | <u>O(E)</u> |
| 25. Salt water | <u>O</u> | 30. Gold necklace | <u>O</u> |

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

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|------------------------|----------|----------------------------|----------|
| 31. Gold | <u>E</u> | 36. Air | <u>M</u> |
| 32. Water | <u>C</u> | 37. Carbon dioxide | <u>C</u> |
| 33. Seawater | <u>M</u> | 38. Silver | <u>E</u> |
| 34. Sugar | <u>C</u> | 39. Ice | <u>C</u> |
| 35. A chocolate sundae | <u>M</u> | 40. A Big Mac [®] | <u>M</u> |