

# Matter Homework Packet

Name \_\_\_\_\_

Period \_\_\_\_\_

## Physical and Chemical Changes and Properties of Matter Worksheet

Classify the following as chemical change (cc), chemical property (cp), physical change (pc), or physical property (pp).

- |                                 |                           |
|---------------------------------|---------------------------|
| 1. _____ Heat conductivity      | 8. _____ Combustible      |
| 2. _____ Silver tarnishing      | 9. _____ Water freezing   |
| 3. _____ sublimation            | 10. _____ Wood burning    |
| 4. _____ magnetizing steel      | 11. _____ Acid resistance |
| 5. _____ length of metal object | 12. _____ Brittleness     |
| 6. _____ melting                | 13. _____ Milk souring    |
| 7. _____ exploding dynamite     | 14. _____ baking bread    |

Identify the following as being true or false to the left of the sentence.

- \_\_\_\_\_ 15. A change in size or shape is a physical change.
- \_\_\_\_\_ 16. A chemical change means a new substance with new properties was formed.
- \_\_\_\_\_ 17. An example of a chemical change is when water freezes.
- \_\_\_\_\_ 18. When platinum is heated, then cooled to its original state, we say this is a physical change.
- \_\_\_\_\_ 19. When milk turns sour, this is a physical change because a change in odor does not indicate a chemical change.
- \_\_\_\_\_ 20. When citric acid and baking soda mix, carbon dioxide is produced and the temperature decreases. This must be a chemical change.

Identify each of the following as a physical or chemical change.

21. \_\_\_\_\_ You leave your bicycle out in the rain and it rusts.
22. \_\_\_\_\_ A sugar cube dissolves.
23. \_\_\_\_\_ Scientist breaks-up water into oxygen and hydrogen gas.
24. \_\_\_\_\_ Burning coal for a barbecue.
25. \_\_\_\_\_ Trimming a bush because it has grown too tall.

Name \_\_\_\_\_

Period \_\_\_\_\_

## Classifying Matter Worksheet

Classify each of the following substances as an element, a compound, a solution (homogenous mixture, or a heterogeneous mixture.

1. Sand

2. Salt

3. Pure Water

4. Soil

5. Soda just opened

6. Pure air

7. Carbon Dioxide

8. Gold

9. Brass

10. Oxygen

11. Italian Salad Dressing

12. Salt Water

13. Raisin Bran

14. Silver

15. Lithium Iodide

16. Apple Pie

17. Kool Aid

18. Sugar Water

19. Chocolatechip Cookie

20. Gatorade

21. Gold

22. tacos

23. Lead

24. Ceasar Salad

25. Calcium

26. Whole Milk

27. Skim Milk

28. hydrogen peroxide

29. Potassium

30. Sugar

31. Raisin Bran Cereal with Milk

32. Raisin Bran Cereal without Milk