

Name: _____ Class: _____ Date: _____

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 a metal object | 12. _____ Brittleness |
| 6. _____ Shortening melting | 13. _____ Milk souring |
| 7. _____ Exploding dynamite | 14. _____ Baking bread |

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

- ___ 15. A change in size or shape is a physical change.
- ___ 16. A chemical change means a new substance with new properties is formed.
- ___ 17. An example of a chemical change is when water freezes.
- ___ 18. When platinum is heated and then cooled to its original state, we say this is a chemical 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. _____ A scientist breaks up water into hydrogen and oxygen gas.
24. _____ Burning coal for a barbecue.
25. _____ Trimming a bush because it has grown too tall.

Physical and Chemical Changes and Properties of Matter Worksheet

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- | | |
|-------------------------------------|-------------------------------|
| 1. <u>PP</u> Heat conductivity | 8. <u>CP</u> Combustible |
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| 3. <u>PC</u> sublimation | 10. <u>CC</u> Wood burning |
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| 5. <u>PP</u> length of metal object | 12. <u>PP</u> Brittleness |
| 6. <u>PC</u> shortening melting | 13. <u>CC</u> Milk souring |
| 7. <u>CC</u> exploding dynamite | 14. <u>CC</u> baking bread |

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