

Classify the following <u>properties</u> as physical (P) or chemical (C).		Classify the following <u>changes</u> as physical (P) or chemical (C).	
1. Milk turns sour when <u>acid</u> is added to it.	C	14. Rusting nail.	C
2. Hydrogen gas is <u>colourless</u> .	P	15. Toasting bread.	C
3. Candy is made by pressing powder into pellets.	P	16. Evaporating water.	P
4. A diamond is <u>hard</u> .	P	17. Cutting up carrots.	P
5. Wood turning to ash when burned.	C	18. Silver tarnishing (<u>turning black</u>).	C
6. The melting point of ice is 0 °C.	P	19. A gas becomes a liquid.	P
7. Sodium is a <u>soft, grey metal</u> .	P	20. Baking a cake.	C
8. Iodine is <u>soluble</u> in alcohol.	P	21. Boiling an egg.	C
9. Phosphorus ignites when <u>exposed to air</u> .	C	22. Lighting a cigarette.	C
*10. Rolaids relieve heartburn.	C	23. Bleaching a stain.	C
11. Oxygen is needed for <u>combustion</u> .	C	24. Crushing a stone into sand.	P
12. Iodine kills bacteria.	C	25. Melting ice.	P
13. Water has a density of 1.0 g/mL.	P	26. Foam is made when a can of pop is opened.	P
Classify the following <u>changes</u> as physical (P) or chemical (C).			
27. Water freezes into an icicle in winter and melts in the spring.	P	31. A match ignites. The match head turns <u>black and brittle</u> .	C
*28. Salt is added to water. It can no longer be seen but the water tastes salty.	P	32. A welder starts with three pieces of steel rod. He heats them up so they melt together. Once cooled there is one larger rod.	P
29. A glass bottle drops and smashed into 100 pieces.	P	33. Meat left too long in the fridge changes from red to grey and starts to smell bad.	C
30. Apple cider, when left too long, produces <u>bubbles</u> and tastes and smells different.	C	34. Salty water is left to evaporate on a hot day. As the water disappears the salt is left behind.	P

Evidence of chemical change

1. Difficult to reverse
2. Change in colour
3. Change in smell
4. Bubbles formed when we combine chemicals
5. Solid precipitate when we combine liquids
6. Temperature changes.

Pass in your chemical and physical properties sheet.

In class assignment: Complete the in class assignment - you may use notes, but you must do it on your own. **No phones allowed.**

At the end of the period, or when you have completed the assignment, pass it in.

Mark

**Science 10
Properties and Changes**

Name: _____

Classify the following properties as physical (P) or chemical (C)

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|--|---|
| 1. <u>P</u> Milk is white. | 7. <u>P</u> Molasses has a high viscosity. |
| 2. <u>C</u> Oxygen gas is used in combustion. | 8. <u>C</u> Phosphorus ignites when exposed to air. |
| 3. <u>P</u> Talc is soft. | 9. <u>C</u> Tums relieve heartburn. |
| 4. <u>C</u> Wood turns to ash when burned. | 10. <u>P</u> Bromine is a brown gas. |
| 5. <u>P</u> The boiling point of water is 100°C. | 11. <u>C</u> Iodine kills bacteria. |
| 6. <u>C</u> Sodium reacts with water. | 12. <u>P</u> Mercury is a shiny liquid. |

Classify the following changes as physical (P) or chemical (C)

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|---|--|
| 1. <u>P</u> Wood pellets are made by putting sawdust under high pressure. | 14. <u>P</u> Foam is made when a can of pop is opened |
| 2. <u>C</u> Rusting nail | 15. <u>P</u> Chocolate is melted and then hardened |
| 3. <u>C</u> Toasting bread | 16. <u>P</u> Salt is added to water. It can no longer be seen but the water tastes salty. |
| 4. <u>C</u> Cooking a hamburger on a grill | 17. <u>P</u> A plate drops and breaks. |
| 5. <u>P</u> Cutting up potatoes | 18. <u>C</u> Grape juice, when left too long, produces bubbles and tastes and smells different. |
| 6. <u>C</u> Silver tarnishing (turning black) | 19. <u>C</u> An instant ice pack is "popped" and it gets cold. |
| * 7. <u>C</u> A shiny penny becomes dull over time. | 20. <u>P</u> Heating a piece of iron and cooling it quickly in water |
| 8. <u>P</u> Boiling water in a kettle | 21. <u>C</u> Cheese left in the fridge too long turns green. |
| 9. <u>C</u> Frying an egg | 22. <u>P</u> Salty water is left to evaporate on a hot day. As the water disappears the salt is left behind. |
| 10. <u>C</u> Burning a match | |
| 11. <u>C</u> Bleaching a stain | |
| 12. <u>P</u> Crushing a stone into sand | |
| * 13. <u>P</u> Water condenses on a cold glass | |

