

PHYSICAL AND CHEMICAL PROPERTIES AND CHANGES

Name _____

Identify the following as a chemical (C) or physical property (P):

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|---------------------------------|----------------------------|
| _____ 1. blue color | _____ 8. melting point |
| _____ 2. density | _____ 9. reacts with water |
| _____ 3. flammability (burns) | _____ 10. hardness |
| _____ 4. solubility (dissolves) | _____ 11. boiling point |
| _____ 5. reacts with acid | _____ 12. luster |
| _____ 6. supports combustion | _____ 13. odor |
| _____ 7. sour taste | _____ 14. reacts with air |

Identify the following as physical (P) or chemical (C) changes.

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|--|--------------------------------------|
| _____ 1. NaCl (Table Salt) dissolves in water. | _____ 9. Milk sours. |
| _____ 2. Ag (Silver) tarnishes. | _____ 10. Sugar dissolves in water. |
| _____ 3. An apple is cut. | _____ 11. Wood rots. |
| _____ 4. Heat changes H ₂ O to steam. | _____ 12. Pancakes cook. |
| _____ 5. Baking soda reacts to vinger. | _____ 13. Grass grows. |
| _____ 6. Fe (Iron) rusts. | _____ 14. A tire is inflated. |
| _____ 7. Alcohol evaporates . | _____ 15. Food is digested. |
| _____ 8. Ice melts. | _____ 16. Paper towel absorbs water. |

True or False. If false, correct the underlined portion of the statement so that it is true.

1. A physical change is a change of matter from one form to another without a change in chemical properties.
2. A physical change is a change that occurs when a substance changes composition by forming one or more new substances.
3. Color change is evidence that a chemical change may have occurred.
4. Fizzing or foaming is evidence that a chemical change may have occurred.
5. Production of light is evidence that a physical change may have occurred.
6. Production of heat or light is evidence that a chemical change may have occurred.
7. A change in odor is evidence that a physical change may have occurred.
8. Chemical changes can be reversed by physical changes.

Scenario	Chem or Physical Change?	Evidence
Umm! A student removes a loaf of bread hot from the oven. The student cuts a slice off the loaf and spreads butter on it.		
Your friend decides to toast a piece of bread, but leaves it in the toaster too long. The bread is black and the kitchen is full of smoke.		
You blow dry your wet hair.		
In baking biscuits and other quick breads, the baking powder reacts to release carbon dioxide bubbles. The carbon dioxide bubbles cause the dough to rise.		
You take out your best silver spoons and notice that they are very dull and have some black spots.		
Chewing food to break it down into smaller particles represents a _____ change, but the changing of starch into sugars by enzymes in the digestive system represents a _____ change.		
In a fireworks show, the fireworks explode giving off heat and light.		
Food color is dropped into water to give it color.		
A straight piece of wire is coiled to form a spring.		