



Directions: Read each statement and decide if it is a chemical change or a physical change and then place a check in the appropriate column for each statement.

➡ **Physical Change:** The substance simply changes shape, size, phase, etc, it only changes how it appears.

➡ **Chemical Change:** The substance burns/reacts and can release some of it's "parts" into the air. The substance completely changes to something brand new!

Change	Physical Change	Chemical Change
1. Salt dissolves in water		
2. Acid reacts with magnesium and produces hydrogen gas		
3. A piece of copper is cut in half		
4. A sugar cube is ground up		
5. Water is heated and changes to steam		
6. Iron rusts		
7. Ethyl alcohol evaporates		
8. Ice melts		
9. Milk sours		
10. Food is digested in the stomach		
11. Paper burns		
12. Fireworks explode		
13. Alka-seltzer gives off carbon dioxide		
14. Water absorbed by paper towel		
15. Pancakes cook on a griddle		

## Physical Change vs. Chemical Change

How to tell the difference...

Evidence:	
Physical	Chemical
1. Color changes - ex. with crayons	1. Color change - new substance
2. Phase changes	2. Bubbling or foaming
3. Shape changes	3. Fizzing
4. Size changes	4. Heat
5. Dissolving -substance disappears in water	5. Light or sound
6. Bending, crushing, cutting, mixing	6. Smell (odor)

Label each of the following as a Physical or Chemical change:

Evidence:

- |                                   |       |       |
|-----------------------------------|-------|-------|
| 1. Butter melting                 | _____ | _____ |
| 2. Wood rotting                   | _____ | _____ |
| 3. Fall leaves changing color     | _____ | _____ |
| 4. Burning sugar                  | _____ | _____ |
| 5. Digesting a hamburger          | _____ | _____ |
| 6. Mixing chocolate into milk     | _____ | _____ |
| 7. Cutting an apple               | _____ | _____ |
| 8. Rust forming on a tin can      | _____ | _____ |
| 9. Burning toast in the toaster   | _____ | _____ |
| 10. Baking bread in the oven      | _____ | _____ |
| 11. Ripping up a note             | _____ | _____ |
| 12. Etching glass with acid       | _____ | _____ |
| 13. Painting a fence              | _____ | _____ |
| 14. Chewing a carrot              | _____ | _____ |
| 15. Roasting marshmallows in fire | _____ | _____ |