



# Physical vs. Chemical Changes

## So What's Up?

Experiment with physical and chemical changes by transforming various materials.

## "Why?" You Ask

A physical change simply means that you have rearranged the shape of the object. It can be characterized as tearing, wadding, rolling, stretching, flattening, or otherwise physically changing the shape without altering the chemical properties. If you wad up a piece of paper, you create a physical change. If you burn that piece of paper, you cause a chemical change. You can identify a chemical change if there is a change in color, state, magnetism, or if heat is produced or lost.

### Physical changes include:

1. Wadding up a piece of paper.
2. Chopping a piece of wood in half with an ax.
3. Tearing a piece of cloth.
4. Cutting a hamburger with a knife.
5. Biting into an apple.
6. Flattening a lump of clay with your fist.
7. Hitting a baseball with a bat.
8. Sitting on a balloon and popping it.
9. Blowing bubbles out of a soap solution.
10. Opening a piece of wrapped candy.

### Chemical changes include:

1. Digesting your dinner.
2. Removing grease with soap.
3. Cooking an egg in a hot pan.
4. Milk that has gone sour.
5. Lighting the wood you chopped in half on fire.
6. Starting your car engine and burning gasoline.
7. Putting acid into your sink to dissolve hairballs.
8. Making cookie batter and baking it.
9. Taking an antacid tablet.
10. Exercising and using sugars and fats stored in your body.

