

# Two Ways to Change

Everything is **matter**. It's made of something and takes up space. Matter changes in two ways: physical changes and chemical changes. Let's look at the differences!

Physical changes create different states, or forms, of the same matter. Water is still water if it changes from a liquid state into ice, a solid state.



Chemical changes create entirely new substances. After the chemical change, physical methods, such as cutting, drying, filtering, spinning, or changing temperature or pressure, can't undo the change.



Fire chemically changes wood into a new substance, ash or soot and gas. You can't bring the wood back after it has burned.

## Spellbinding Alchemy

Ancient scholars, called **alchemists**, believed they could change metals into gold or produce other amazing results. Modern science has never proven their claims. However, their quests have inspired many stories, including *Harry Potter and the Sorcerer's Stone*.

