Experiments that show Physical Changes

Physical changes are relatively easy to identify. If only the form of a substance changes, you have observed a physical change. A common physical change occurs when matter changes from one phase to another. When an ice cube melts for example, it becomes liquid water. The solid ice and liquid water have the same composition. The only difference is form.

What is the difference between chemical changes and physical changes?
In a physical change the composition or way that a substance is made up is not changed; a chemical change causes the composition or way that a substance is made up to change.



Water is a good example of a physical change as it changes from one state to another.
Pictured is water as an ice cube water as a liquid
water as a gas

Physical changes occur when objects undergo a change that does not change their chemical nature. A physical change involves a change in physical properties. Physical properties can be observed without changing the type of matter. Examples of physical properties include: texture, shape, size, color, odor, volume, mass, weight, and density. An example of a physical change occurs when making a baseball bat. Wood is carefully crafted into a shape, which will allow a batter to best apply force on the ball. Even though the wood has changed shape and therefore physical properties, the chemical nature of the wood has not been altered. The bat and the original piece of wood are still the same chemical substance.



A tree, boards, and making a bat out of wood are examples of a physical change. The tree is cut down—the wood is cut into boards—the wood is shaped into a bat –shows a physical change.
The wood is still the same chemical substance, regardless of whether it is the tree, boards, or a bat.