

Physical & Chemical Changes

There are 2 types of changes that we can observe:

Physical changes – the substance remains the same. It may change state, but it is still the same substance

Chemical changes – the substance changes and becomes something different

5 signs a chemical change has occurred:

1. **Energy is released** – a new substance has formed that gave off light, heat or sound
2. **Colour change** – a new substance has formed that has a different colour than the original substance
3. **Odour change** – a new substance has formed that has a new smell than the original substance
4. **Gas is formed** – bubbles indicate the formation of a gas (not caused by heating)
5. **A solid is formed** – a new substance that is produced does not dissolve in the mixture and shows up as a solid (solids formed this way are often powdery and are called precipitates – they separate from a solution)

You decide!
Is a Physical or Chemical change taking place?

Station 1

Tear up paper

Station 2

Burn magnesium strip

Station 3

Acid + base with thermometer

Station 4

Melt an ice cube

Station 5

Add a small scoop of baking soda to 1/2 a test tube of vinegar.

Station 6

Add 1/3 of a test tube of Potassium Iodide to 1/3 of a test tube of Lead nitrate

Station 7

Bending a paper clip