	SHS LEARNING ACTIVITY	CHEM1-01-03

Name: _____ **Score/Mark:** _____

Grade and Section: _____ **Date:** _____

Strand: ☐ **STEM** ☐ **ABM** ☐ **HUMSS** ☐ **ICT (*TVL Track*)**

Type of Activity: ☐ Concept Notes ☐ Skills: Exercise/Drill ☐ Illustration ☐ Laboratory Report ☐ Essay/Task Report ☐ Other: _____

Activity Title: 01-03.Physical and chemical changes v03

Learning Target: To differentiate between physical and chemical changes

Authors/References: Victor Sojo

Chemistry studies how matter (substances) changes into different matter (other substances). These processes of **chemical change** are named **chemical reactions**.

Some examples of chemical changes or chemical reactions are the rusting of an iron nail over time, or the cooking of an egg. We can often detect that a reaction has happened because colors, smells, textures or tastes change.

But often, even very obvious changes do not necessarily involve a transformation of substances into other substances. For example, **liquid water** can be frozen into **ice**, or it can be boiled into **vapor**, but it is still water. We know this because when ice **melts** or vapor **condensates**, we get liquid water again. These changes are known as **physical changes**.

Questions

1. Do you think that all chemical changes involve a change in color, smell, taste, or texture, or do you instead think that maybe there are some chemical changes that are difficult to detect with our body's senses?
2. When wood burns, it turns into gases that go into the atmosphere. Some of these gases can then be re-absorbed by plants and turned back into wood. Do you think these changes are chemical or physical? Why?