**Topic: Living and Non-living Things (I)** 

**Sub-topic**: Meaning, Classification, and States of Matter

## **©** Lesson Objectives

By the end of this lesson, students should be able to:

- 1. Define what living and non-living things are.
- 2. Identify and classify examples of both.
- 3. Understand and describe the three basic states of matter.
- 4. Explain the differences between living and non-living things using characteristics.

## Introduction

Everything around us — from the air we breathe to the people we interact with — can be grouped into two broad categories: **Living** and **Non-living** things.

This classification helps us understand how different things behave, how they interact with their environment, and how they are useful to us.

# 1. Meaning of Living and Non-living Things

#### What are Living Things?

Living things are things that **have life**. They can carry out life processes such as:

- Movement (e.g., animals walking, plants turning toward light)
- Respiration (breathing or energy release)
- Sensitivity (respond to changes in environment)
- Growth
- Reproduction (ability to produce offspring)
- Excretion (removal of waste)
- Nutrition (feeding)

These processes are often remembered using the acronym **MR NIGER D**.

### **Examples of Living Things:**

- Humans
- Dogs
- Trees
- Birds
- Fish
- Insects
- Grass

### What are Non-living Things?

Non-living things are things that **do not have life**. They:

- Do not move on their own
- Cannot grow or reproduce
- Do not eat or breathe
- Cannot respond to their environment

Some non-living things were once part of living things (e.g., wooden furniture from trees), but once life processes stop, the object is no longer living.

### **Examples of Non-living Things:**

- Rock
- Chair
- Water
- Air
- Books
- Plastic
- Sand

## 2. Classification of Things in Our Environment

**Living Things** Non-living Things

Human beings Stones

Goats, cows, birds Desks, tables

Mango trees, grass Water, air

Fish, snails Radios, phones

#### 1 3. States of Matter

Matter is anything that has **mass** and occupies **space**. All matter exists in one of these three physical states:

State Description Examples

Solid Has a fixed shape and volume Stone, iron, chalk

Liquid Has a fixed volume but takes the shape of a container Water, milk, oil

Gas Has no fixed shape or volume; spreads in all directions Air, steam, oxygen

- Solids are tightly packed and do not flow.
- **Liquids** flow and can be poured.
- Gases are invisible and expand to fill space.

## Summary of Key Points

- Living things show the characteristics of life (MRS GREN or MR NIGER D).
- Non-living things do not carry out life processes.
- Everything around us exists in one of the three states of matter: solid, liquid, or gas.