

# Grade 6 – Science

## DEMO CLASS MATERIAL

### Topic: Water Cycle

#### 1. Introduction

The water cycle is a continuous process through which water moves around the Earth. It involves the changes of water between liquid, solid, and gaseous states. This cycle is essential for maintaining life and balancing the Earth's climate.

#### 2. Key Processes in the Water Cycle

- **Evaporation:** The process where water from oceans, rivers, and lakes turns into water vapour due to the heat of the Sun.
- **Condensation:** Water vapour cools down to form tiny droplets of water, creating clouds.
- **Precipitation:** When water droplets in clouds become heavy, they fall back to the Earth as rain, snow, or hail.
- **Collection:** Water gathers in oceans, lakes, rivers, and soil. This collected water again evaporates, continuing the cycle.

#### 3. Diagram Explanation (Verbal)

Imagine the Sun heating water bodies. Water rises as vapour (evaporation), forms clouds (condensation), falls as rain (precipitation), and flows back to oceans and lakes (collection).

#### 4. Real-Life Examples

- Drying of wet clothes under the sun (evaporation)
- Formation of dew drops on grass (condensation)
- Rainfall on a cloudy day (precipitation)

#### 5. Student Activity

**Experiment:** Take a bowl of warm water and cover it with a plate. After some time, observe droplets forming on the plate. This shows evaporation and condensation in a simple form.

#### 6. Practice Questions

1. What is evaporation?
2. Name the process by which clouds are formed.
3. What happens during precipitation?
4. Why is the water cycle important for life on Earth?
5. Give one real-life example of condensation.

#### Answer Key

1. The process in which water changes into water vapour due to heat.
2. Condensation.
3. Water falls to the Earth as rain, snow, or hail.

4. It maintains water availability, supports life, and balances climate.
5. Dew drops forming on grass.