

SOL LS.7 - ADAPTATIONS SUPPORT AN ORGANISM'S SURVIVAL

- a. Biotic and Abiotic factors define land, marine, and freshwater ecosystems
- b. Physical and behavioral characteristics enable organisms to survive within a specific ecosystem

CLIMATE

- Earth's **tilt** on its axis, combined with its **revolution** around the sun, plays a major role in determining the **climate** of a given location.
- **Other factors**, such as latitude, temperature, precipitation, topography, elevation, and human actions can also influence **climate**.

Earth's tilt as it revolves around the sun is a major factor determining climate



Aquatic Ecosystems



Marine



Freshwater

TERRESTRIAL, MARINE AND FRESHWATER ECOSYSTEMS

- **Ecosystems** can be **large** or **small**, **terrestrial** or **aquatic**.
- **Ecosystems** are **dynamic**, experiencing shifts in population composition and abundance and changes in the physical environment over time, which ultimately affects the stability and resilience of the entire system.



Terrestrial (land) ecosystem

PHYSICAL AND BEHAVIORAL CHARACTERISTICS THAT ENABLE ORGANISMS TO SURVIVE

- Organisms possess **physical characteristics** and behaviors that enable them to survive in their environment and obtain resources to meet basic needs and carry out life processes, increasing their chances of survival.



You should:

- compare **terrestrial** (land), **marine** (saltwater), and **freshwater** ecosystems
- know how adaptations - **structural** (physical) and **behavioral** - enable organisms to survive in an ecosystem