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Climate

Understanding Climate: The Earth's Weather Patterns Explained

DEFINITION

> Climate refers to the long-term patterns of temperature, humidity, and precipitation in a region. It differs from weather, which describes short-term atmospheric conditions.

KEY CONCEPTS

Weather vs. Climate

Weather is the day-to-day state of the atmosphere, while climate is the average of these conditions over a longer period.

Climate Zones

The Earth is divided into different climate zones, such as tropical, temperate, and polar, based on temperature and precipitation.

Factors Affecting Climate

Climate is influenced by factors like latitude, altitude, ocean currents, and wind patterns.

Global Warming

Global warming refers to the increase in Earth's average temperature due to greenhouse gas emissions.

Climate Change

Climate change encompasses significant changes in global temperatures and weather patterns over time.

EXAMPLES

→ Tropical climates have warm temperatures and high rainfall year-round.

→ Deserts experience very little precipitation and extreme temperature variations.

→ Temperate climates have four distinct seasons with moderate rainfall.

MEMORY TIPS

★ Remember 'W' for Weather (short-term) and 'C' for Climate (long-term).

★ Use the acronym 'FLAP' for factors affecting climate: Latitude, Altitude, Proximity to water.

★ Visualize a globe to remember different climate zones and their characteristics.

COMMON MISTAKES

✗ Confusing weather with climate by thinking they are the same.

✗ Overlooking the impact of human activities on climate change.

✗ Not recognizing that climate can vary significantly even within the same country.

QUICK RECAP

Climate is the long-term average of weather patterns in a region. Understanding climate zones and factors affecting climate is crucial for grasping global warming and climate change.